THE BANK AND THE TREASURY

". . . About twenty-five years ago, Lord Revelstoke, at the head of the great firm [Baring Brothers], was visiting a German watering-place, where he met one of our leading American bankers. Naturally, their conversation drifted into a discussion of the financial situation, and in the course of the talk, Lord Revelstoke remarked that he intended during the next ten or fifteen years to enter extensively into modern financial banking. From that time the character of the business of the Barings began to change, and from being the greatest merchants in commercial credits, they put their resources more and more into fixed forms of investment, into speculative ventures in securities and into the promotion of financial enterprises. What was the result? In 1890 the . . . world was startled by rumors reflecting upon the credit of this house, hitherto considered invincible, and its failure was only averted by the most strenuous efforts of the Bank of England, with the aid of the strongest bankers of London. . . .

"We refer to this striking chapter in financial history simply because it illustrates one of the peculiar dangers of our own times. Unquestionably, the special temptation to which our banks are now subjected is the temptation to turn from commercial to financial banking; to change from the buying and selling of commercial credit into investments in securities and loans extended to promote financial enterprises; in short to change their business from that of commercial banks to that of finance companies.

"The process of concentration in banking which is going on would possess little danger were it not accompanied in so large a degree by this change. The house of the Barings was a striking example of concentration in banking. Its business encircled the globe; its wealth was enormous, and so great were its transactions that even at the time of its trouble in 1890 its holdings of paper amounted to $100,000,000. But when it began to divert its interest, formerly directed almost exclusively to commercial credits, and began to throw the weight of its prestige and resources into the field of investment, speculation and promotion, then the power of its concentration of capital became a menace to the world. In the same way concentration in banking, which is going on at such rapid rate in New York, would not be open to much or any criticism if such concentration . . . was employed for the purpose of facilitating the commerce of the country instead of being used in purely financial undertakings." — THE WALL STREET JOURNAL, *New York, Oct.* 29, 1904.

THE BANK
AND
THE TREASURY

By

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PREFACE

This is not a general treatise on money and banking. The intention is, rather, to contribute something to a single subject of national interest — the problem of providing a more "sound" and "elastic" system of current credit-funds. In recent discussion of currency and banking, it has seemed that a too narrow view has been taken: By one class the assumption is made that "issues" of Government are capable of affording the "elasticity" desired; another has attempted to demonstrate that in an "assets-bank-currency" is to be found the nostrum for financial ills. Both classes have failed to see that our financial superstructure rests on two distinct and widely separated pillars — the Independent Treasury, and the Commercial Bank; that each has its own burden and responsibilities; that the one is an institution of public-money-issue, the other an institution of private-credit; that the one supports a large issue of credit-money upon a "gold reserve" for its foundation, the other a still larger issue of bank-credit upon a "lawful money reserve." Upon these two pillars is rested a superstructure of private-credit incalculable in amount — a magnificent pile, to the

building of which nearly every business transaction of the immediate past has contributed and which in its long-time credit obligations projects itself into the future, involving to a greater or less extent the prospective business of the next fifty years. It is this towering superstructure of credit, sensitive to the last degree, and the contemplation of the perils of a shock to so delicate and comprehensive an organization, that makes a matter of currency or banking reform a dangerous undertaking — one that should be carefully considered and not entered upon lightly from motives of political expediency.

During the last two decades currency and banking questions have been prominent in the councils of the nation, and many radical changes have been proposed. Every sudden institutional or social change must of necessity be accompanied by disturbances due to breaking bonds of custom and to the introduction of certain elements of the unknown as premises for judgments concerning the future. This fact, together with the known sensitiveness of the credit structure, suggests that whatever the financial reforms to be undertaken, we break with the present no further than is necessary to accommodate immediate needs. Sweeping changes would amount to financial revolution, and proposals of this kind should be peremptorily dismissed.

The suggestion that we should at once abolish one of the pillars upon which the national-credit super-

structure rests (the United States Sub-Treasury) brings with it nothing but a picture of national distress. No change of this kind could safely be undertaken till the present burden of credit-money had been removed from the capital; there must first have been a complete revision of the monetary system — a system that we have labored a century to bring to its present state of "soundness" and which in its architectural plan is yet scarcely completed. The proposition to throw the whole financial burden on the commercial bank, and to strengthen this by a scheme of centralization, carries with it the same certainty of disaster, unless the change be gradual, and unless also every shift of stress be made after a careful calculation of probable results.

And this calculation should be something more than philosophical conjecture. It should be based on experience. In the preparation of this work it has been the constant endeavor to measure carefully every salient point of the present financial structure, to take into account the monetary and banking experience of the past, and, having in view this experience, to suggest certain results that may be attained in the direction of increased soundness and elasticity by slight changes in the organic relations of the system with which we are now working and which in all its details we may understand. In making these suggestions it has been the underlying belief that experience is the only safe guide to judgment — that

evolution and not revolution should be the principle of financial reform.

Any attempt to analyze national banking conditions and the results of banking and currency operations must necessarily be based on published reports. For the purpose of a better understanding of financial relations the concrete statistical data thus found have been collected, and co-ordinated, and reduced to charts. It is a matter of regret that more of this history and experience cannot be graphically displayed in a publication of this kind. Much of valuable suggestion has been obtained from letters of transmission, reports and published documents of the Treasury Department and of the standing committees of the House and Senate. The public utterances and views of public men and of leading bankers, of editorial and monograph writers, have lent much color to thought in the formulation of working hypotheses for the consideration of available material. A proper appreciation of the problem of increased "soundness" and of "elasticity" in credit funds, however, rests largely upon the analytical methods and conclusions of public accountancy. The question even turns on relations of current assets to current liabilities of institutions issuing credit — on resources "available" for payment of credit obligations outstanding. Without in any way ascribing to others opinions here expressed or conclusions reached, it is due to say that in getting at a proper basis for the

consideration of this problem, my indebtedness is chiefly to my associates, Mr. Elijah W. Sells, Mr. Charles S. Ludlam, Mr. Deroy S. Fero, and Mr. Homer A. Dunn, whose long professional experience in the analysis of financial data has made them invaluable critics. In this relation, I also wish to express gratitude to Mr. Edward P. Moxey, for the liberality with which he has given his time, and who in his views has reflected the experience of years of service as Government expert and as professional bank accountant; also to Mr. Herbert G. Stockwell, who has ever been kind and generous in suggestion and criticism concerning matters falling within his acquaintance. Further, I wish to express gratitude to Mr. Charles G. Dawes, whose experience as Comptroller of the Currency, and more recently as President of the Central Trust Company of Illinois, has given to the author much encouragement when reflected through words of approval and generous interest in results.

A considerable part of the matter contained in some of the chapters following has appeared in periodicals and in the published proceedings of the Pennsylvania Bankers' Association. For permission to use such portions as have been brought out periodically, I am under obligation to the publishers of The North American Review, the Annals of The American Academy of Political and Social Science, The Financier, The Capitalist, The Railway World,

and The (New York) Mail and Express. The collection and classification of data and the compilation of many statistical tables and summaries, not here shown but on which reasoning is based and from which conclusions are drawn, are the contribution of my wife; except for her active interest and intelligent devotion to the subject this published result would not have been possible without sacrifice of other interests demanding attention. To her I am further indebted for assuming responsibility for the most trying of all details — manuscript correction and proof-reading. F. A. C.

OCTOBER 15, 1904.

30 Broad Street, New York.

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THE BANK AND THE TREASURY

Chapter I

COMMERCIAL BANKING AND SPECULATION — A FINANCIAL RETROSPECT

December, 1890, Baring Brothers announced to the world that the credit institutions of Europe had called a halt. A period of promotion and speculation in new industrials, in railways, and in the securities of South America, Australia, and South Africa was suddenly ended. The movement preceding the failure had been one of expansion — a struggle for increasing profits; the movement following the failure was marked by credit retraction and trade depression — by efforts to recoup and prevent further loss. Although for two years after 1890 we had tremendous forces working in our favor (with unprecedented yields of grain and higher prices of food stuffs, due to crop failure abroad), the detracting influences of foreign depression and foreign financial reorganization brought home to the United States the fact of over-speculation; in 1893 our credit institutions collapsed and we followed the wake of Europe through a period of depression. Our experience of 1893, following 1890, was similar to our financial collapse in 1884,

Periods of credit fluctuation

following foreign failures in 1881. September, 1902, brought us again to face the possibility of another credit reaction.

About two years before, another period of speculation abroad had come to an abrupt end; since that time Germany and England had been passing through financial readjustment and reorganization. Here in the United States, as in the two years following 1890, we had forces at work to keep the wheels of industry moving at an increasing rate, and trade journals looked upon this growing activity as evidence of national thrift — an era of unprecedented prosperity based on safe business methods. Those representing manufacture, merchandising, and transportation enterprise saw ahead nothing but increasing activity. But the experience of the last four months of 1902 caused men in financial circles to regard the situation with feelings of apprehension. Months of strain on our commercial credit institutions, months of adverse trade balances, months of increased speculation had put those in control of financial interests on their guard.

Speculative reactions

Causes of Credit Fluctuations

After September, 1902, the financial situation was the general topic of discussion among bankers, and these deliberations found strong expression in appeals to the National Government for measures of relief. Among those who early sounded notes of

warning was the vice-president of the National City Bank of New York. Commenting on the financial outlook in November, 1902, Mr. Vanderlip showed that from 1896 to 1902 the increase in business activity of every kind had been accompanied by a like increase in the credit-accounts (so-called deposits) sold by banks to their customers; and that along with so-called prosperity had been purchases of commercial paper by the banks by means of these increased book-credits or "deposits." He called attention to the fact that the expansion in the credit-accounts (deposits) of the National banks alone, since 1890, had amounted to $1,300,000,000, while other institutions of deposit had increased their credit-accounts (credit-funds offered to the public for current use) $2,300,000,000 — a total increase of $3,600,000,000; within six years there had been an increase of credit-funds in the form of bank accounts, amounting to almost double the entire money stock of the country both in circulation and in the Treasury.

Causes of credit expansion

But what had been the increase in banking equipment? What provision had been made by the banks for maintaining these increased burdens on the credit structure? After showing that during the three years following 1899 the credit accommodations of National banks alone had increased $1,300,000,000, Mr. Vanderlip further commented as follows: "With that increase in liabilities of Na-

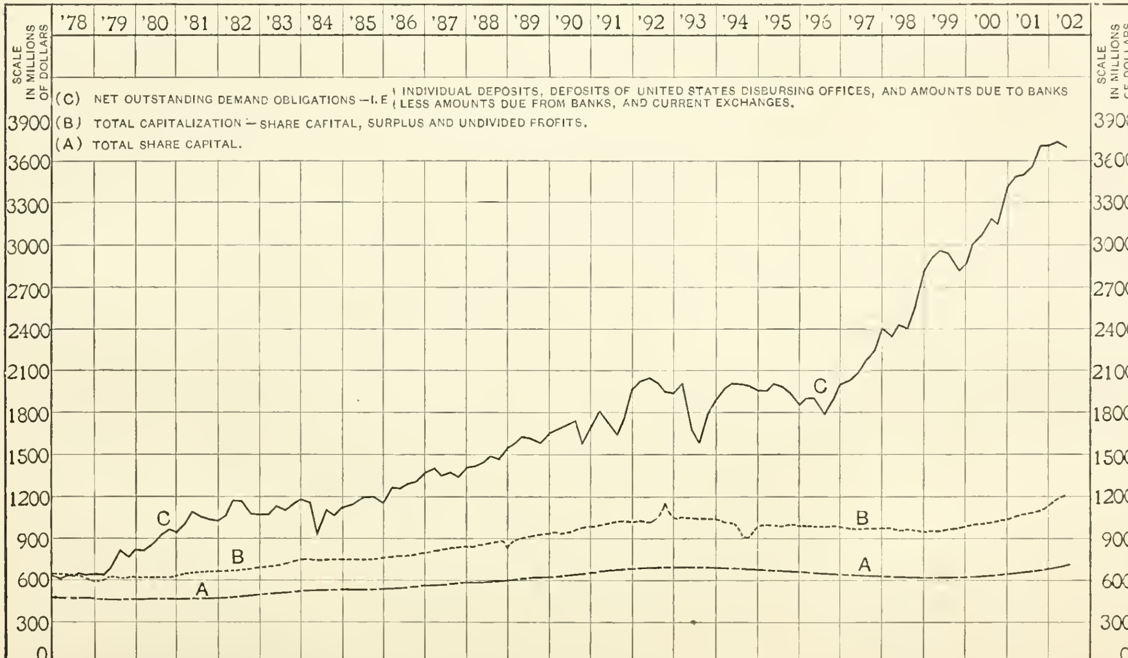
tional banks in mind, let us look at the assets representing the reserve basis. The total of specie and legal-tenders held by National banks last month [October, 1902] was $508,000,000. The total at the beginning of 1899 was $509,000,000. Here we have an expansion of $1,300,000,000 in deposits [demand obligations of the banks used in the community as funds], while the basis of gold and legal-tenders upon which that inverted pyramid stands is actually slightly smaller than it was at the beginning of the period. Now, in that same time, the deposits of the other banks — State banks, trust companies, savings banks, and private banks — have probably increased not far from three billion dollars, and there is little likelihood that their gold and legal-tender reserve is materially larger than — if it is as large as — at the beginning of 1899. We have had, then, in less than four years, an increase in the bank deposits [bank credit-accounts] of the country of over four billion dollars accompanied by no increase in the specie or legal-tender holdings of these banks."

Credit weakness due to inflation

Causes of Credit Contraction

The data relied on for this conclusion were taken from the report of the Comptroller, an official compilation made from the returns of the banks themselves. The evidence presented in the report of the Comptroller, however, went further; it showed

I. CHART SHOWING THE FLUCTUATIONS IN CREDIT ACCOMMODATIONS IN THE UNITED STATES AS COMPARED WITH BANK CAPITALIZATION



that, during the period under discussion by Mr. Vanderlip, the capital of these institutions had not been proportionately increased. We may take a still longer period: May, 4, 1893 (before the depression began), the capital, surplus, and undivided profits of National banks amounted to $1,041,-807,066.87; September 15, 1902, at the time of the last report before the more recent tenseness of the financial situation began to be felt, the total of capital, surplus, and undivided profits was only $1,201,145,882.69, a decrease of nearly $11,000 per bank doing business. There had been an increase of $1,561,335,896.44 in obligations to depositors, while the gross increase in capitalization available to support this increase in demand liabilities was only $159,338,815.82, about ten per cent. The average net increase in deposit liabilities was $282,418; the net decrease of capital was $10,951 per bank doing business.

Lack of capital support

The banking equipment of 1893 had proved too weak to support outstanding credit obligations. In September, 1902, the current credit-accounts outstanding were vastly larger than in 1893. Without, therefore, materially increasing the capital employed in the business, in fact actually decreasing the average capital per bank doing business, the banks had been offering to the public, and actually selling, an increase in accounts-payable over those outstanding in 1893

Comparison of 1893 and 1902

amounting to $1,567,000,000; in 1902 they had sold an amount of demand-credit for use in the business community as funds equal to about double the amount of deposit liabilities outstanding in 1893. The experience of 1902 was a repetition of the experience of 1893, and this in turn was a repetition of 1884 and 1873. In each of the previous cases disaster had followed close on the heels of an inflation of credit-accounts.

Methods Employed for Expanding Commercial Credit

But in his address of warning Mr. Vanderlip did not stop with showing the weakness of the reserve basis. He proceeded to a second conclusion: "What," he asks, "has brought about this remarkable development of bank-credit?" The answer must at once come to the mind of any observer of finance that the principal reason for the expansion of deposits (bank credit-accounts) and the accompanying expansion of loans (commercial paper held by banks) is to be found in the great movement which has been the significant feature in financial affairs of the last half dozen years — the movement to aggregate industrial establishments into single great corporate units and to convert the evidence of ownership into corporate securities which have entered actively into the stream of financial operations. Vast amounts

The flotation of new companies

of new securities have been created in these half-dozen years, based in a large measure upon properties which were before held as fixed investments by individuals, or, if standing in the form of corporate property, the securities of these corporations were more closely held, and in but small measure entered into the financial operations of the day. This movement — tending to convert the evidences of ownership of a great amount of fixed property into a form which has been considered a bank collateral, and which has been made the basis of loans and of corresponding increases or deposits — is undoubtedly the most important single cause for the increase of more than four billion dollars in bank deposits [bank accounts] and bank loans [commercial paper] of the country in the space of three or four years.

The use of new issues as collaterals

A False Notion of "National Prosperity"

We would not shut our eyes to industrial progress — to the fact of augmented capital and increasing production. We would not deny the benefit of thrift, nor the prosperity which comes from mating industry with economy. But such are not the phenomena which have stirred national pride, carried it beyond the rule of reason, and unsettled the judgment of our industrial leaders. Periodically we become psychologically drunk. That which has inebriated has

The imaginative quality in business

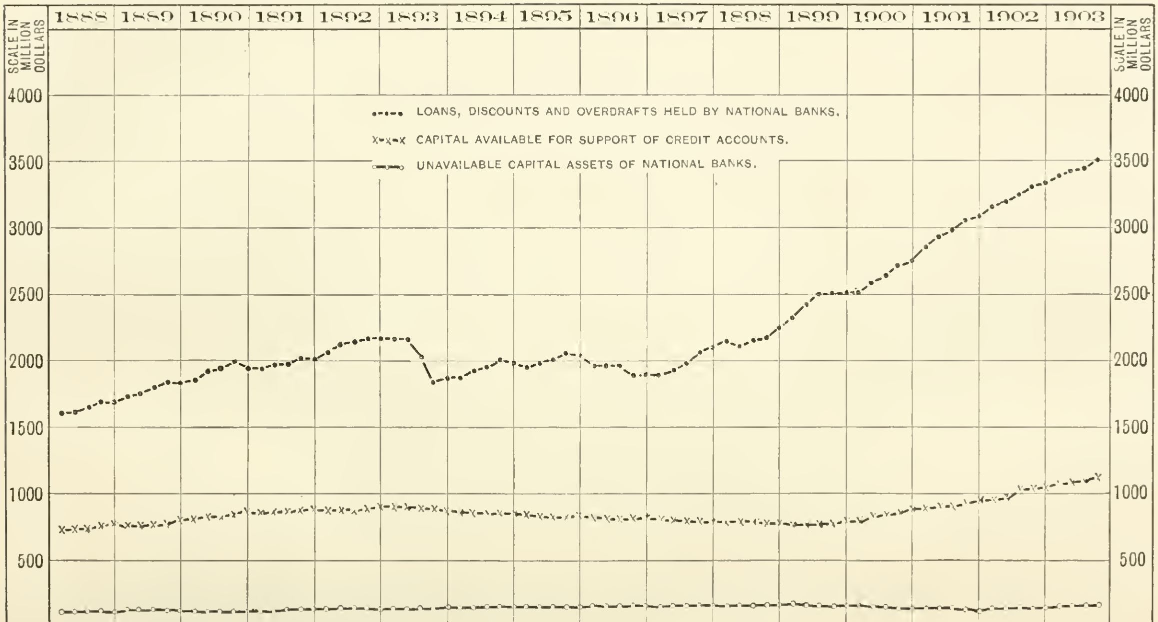
not been the wine at the feast, but a distorted imagination that lives in dream-pictures of opulence. Not the actual increase in wealth, but an increase in the estimates of value given to our possessions swells us with a vanity of hope which marks us for destruction.

The basis for criticism for every "note of caution" addressed to the public during such a crucial period is found in the exuberant feeling then current, expressed in the oft-repeated phrase "national prosperity." If we accept the reasoning of Mr. Vanderlip and others, the ancestral lineage of this wonderful prosperity is not hard to trace. Attention may be called to the fact that the depression from 1893 to 1896 was, as were other similar periods, one of financial reorganization — one of new economies introduced into our industrial establishment. During this period of depression the water had been gradually squeezed out of previously inflated capitalizations; again the nation had come to rely, for its "cash" as well as for its income, on profits from legitimate business. With such an equipment we were able to sell pig iron at a profit of $10 to $12 per ton; steel rails were sold with a liberal return to capital at $17.50 per ton; and bar iron entered a profitable market at 95 cents per hundred.

Readjustment, 1893–1896

After business had been reorganized on a lower base of capital liabilities, thousands of commodities were produced with profit at prices such that they

II. CHART SHOWING THE VOLUME OF COMMERCIAL PAPER PURCHASED BY NATIONAL BANKS, COMPARED WITH THE TOTAL BANKING CAPITALIZATION (CAPITAL STOCK, SURPLUS, AND UNDIVIDED PROFITS)



began to find their way into foreign marts and, in competition with foreign made goods, undersold them. Europe was startled at our commercial strength developed. Our appearance with shiploads of products that others could not manufacture at competitive rates made the world realize that in the Western continent were resources and an industrial development that in free competition might bid defiance to all Europe. Under such circumstances bills of exchange drawn against the sale of these goods formed a true basis for commercial bank loans, and bank-credits were supported by capital-resources adequate to protect them — a banking equipment that included a thirty-three per cent money-reserve for the redemption of demand obligations. And as our foreign trade increased, instead of allowing this banking equipment to become impaired, we at that time imported gold for new banking reserves, to support new credits, and new current funds were again at hand for the support of still larger commercial accommodations in the purchase of bills and commercial paper based on actual sales of produce.

The business revival of 1897

What was the result, however, when the commercial bank extended its support to the capitalization of new promotions and became the chief factor in the "industrial speculation" that grew out of this sudden national awakening? Instead of limiting the commercial banking business to the service of a com-

mercial constituency, instead of devoting the energies and the funds of commercial banks to the accommodation of producers and merchants, a system of underwriting new flotations was inaugurated. This was not a novel experience. Similar practice is recalled by the ex-Assistant Secretary of the Treasury, by reference to the "real-estate" restriction in the National Bank Act. Back of the law forbidding banks to loan on real-estate securities may be seen the long periods of industrial depression and financial reorganization following the panics of 1825, 1837, and 1847.

So-called prosperity and speculative excesses

Each period of prosperity immediately preceding these crises had been one of capitalization of new promotions. At that time, however, speculation was based on the possibilities of increasing profits to be derived from the development of agricultural resources. Westward migration had appropriated for use large areas — a new empire — of grain lands for which new transportation development had opened a market to the seaboard. New cotton, tobacco, and hemp lands enlarged this area to such an extent that the territory appropriated but still undeveloped was larger than the old Atlantic slope to which capital had before confined its investments. In these new areas all other demands gave way to the clamor for new capital, and the commercial banks attempted to supply this demand.

False attitude of the banks

The failure of some eight or nine hundred commercial banking institutions during 1837 and 1838 was the result of this kind of bank-credit employment; the failure of nearly fifteen hundred banks during the next three decades of State banking on investment securities brought to the mind of practical bankers the character and purpose of the commercial bank. In 1903 and 1904, while Europe was going through the throes of financial reorganization, our farmers were blessed with large crops and high prices; a kind and bountiful Providence filled the granaries and the storehouses of the great West and South, permitting us to levy tribute on a distressed world. Temporarily judgment on our financial folly has been suspended, but the instruments of self-destruction are still in the hands of an unthinking public. Organized and capitalized for the purpose of rendering service to a business community in furnishing "current funds," or "cash" for current use, the equipment of the commercial bank is necessarily ill-adapted to the work of "permanent capitalization." To employ the funds of a commercial bank for long-time real-estate investment has ever been found unsafe, and following 1837 legislation was invoked to protect the public against loss. The same need for restrictive and protective legislation is now upon us. And such legislation should be as welcome to the conservative banker as to the

Need for remedial legislation

community. The public requires protection against ruinous disturbances to commercial credit; the conservative banker would be protected against the competition of short-sighted speculators who, posing as bankers, are responsible for these disturbances.

Chapter II

THE USE OF COMMERCIAL BANK-CREDIT IN LIEU OF INDUSTRIAL CAPITALIZATION

In business, there are two distinct classes of obligations for the future payment of money which are made subjects of investment. These two classes are commonly known as (1) capital liabilities, and (2) current credit liabilities, or floating debt. The capital liabilities are those obligations (shares or bonds) incurred by a concern which are sold to obtain funds or properties for permanent equipment or for continuous use in the business. The current credit liabilities are those obligations which are sold to obtain funds for some temporary or current need.

Methods of capitalization

These differing purposes give character to the two classes of contracts as investments. The need for capital being a continuing one, the contracts representing capital liabilities are long-time contracts. Share contracts are those on which the invested principal is not due or payable during the life of the concern without a proprietary resolution reducing the amount of capital employed. Even the current income payments on share contracts are made contingent on

profits and the declaration of dividends; there is no obligation for payment of money which will in any way embarrass the concern or threaten its capital. The "credit" capital liabilities are those contracts for the future delivery of money, such as bonds and mortgages, the principal of which is made payable after such a time that the company may make ample provision by payment out of profits or by occasional refunding. A company which has not been adequately capitalized may, however, procure equipment and properties for continuous use with funds obtained by temporary loans or on floating debt. This bespeaks a condition of under capitalization, is unusual, and is dangerous to the last degree.

Capital requirements

The capitalization of a business by means of long-time obligations should be large enough to cover all of the continuous financial needs. That is, the capital thus contributed must be large enough to provide the properties and equipment permanently or continuously used. To provide, by the sale of long-time obligations, more funds than are needed to carry the stock and to obtain the property and equipment continuously needed, would be to encumber the business with an unnecessary capital burden. To provide, by sale of long-time contracts, funds less in amount than the permanent or continuous needs, would be to handicap the management by putting it under the necessity of constantly refunding capital needs

and to prejudice success by carrying a floating debt, at an increased current cost, for the payment of which there are no assets available other than those which, if taken for liquidation, would impair the equipment in use.

Capitalization of permanent financial needs

The distinction between capital liabilities and current liabilities for the present purpose is this, that the former should be, and usually are, the subject of direct capital investment, while the second usually are the subject of commercial bank-credit investment. The commercial bank is not organized for direct capital investment. It is capitalized for the purpose of supporting its own credit obligations; and these credit obligations in turn are used as a means of purchasing the current liabilities of other business concerns. This is the business of banking. One wishing capital-funds ordinarily must apply to some one having funds for long-time investment. Capitalization depends on the long-time investment powers of a community. The permanent equipment of commerce and industry can safely increase only so fast as investment capital increases. Investment capital is increased by importation as a result of foreign investment, or by net income in the form of returns on prior investments. The demand-credits (or deposits) of banks are neither of these, and therefore are not proper funds for use in purchasing permanent equipment.

In the recent period of inflation, as in other periods of speculation, it was not found necessary to await the tardy development of capital-funds for purchases of this kind; promoters did not find it necessary to appeal to such an investing constituency. They found that by incorporating industrial enterprises and consolidating corporate control into still larger corporate syndicates, these new securities or "industrials" so created could be listed on the market and could be made the subject of general quotation. This step taken, the speculation induced by the sudden realization of our commercial greatness as a world power was converted into an agency for marketing the new securities to banks. An active buying having been "stimulated," it was not necessary to wait for the investing public to absorb the flotation; the margin speculator was utilized to obtain capital-funds from our commercial credit institutions, using the securities so created as "collaterals." One syndicated issue having been introduced into the speculative pool and floated on margins (the promoters having realized) a new consolidation was undertaken and in like manner funds were again procured from the commercial banks. The infection spread from industrials to railroads, to mines, and to every form of undertaking.

Funding permanent needs by means of bank-credit

It was on this character of banking resources — loans, secured by newly created collaterals — that

a large part of the increase in our credit-funds (the deposits of commercial banks) was based. It is to credit obligations of this kind — those used by banks as a means of purchasing collateral notes of brokers and promoters secured by new flotations — that many of the disturbances to commercial credit are attributable. Investments of bank-credit are not capital investments. So to use them is, by sudden credit expansion and then by a subsequent credit contraction, to threaten industry with loss of equipment, or, by inability to contract, to threaten the bank with insolvency. Before such insolvency will be admitted, however, the increased credit burden will be shifted on the commercial constituency of the bank. The bank — the provider of current funds for current use — is forced to sacrifice the ends of its creation; being allured into this kind of investment by a prospect of large gains from speculation, it is converted into an instrument of business uncertainty and of wholesale financial debauchery.

The character of bank-credit so created

Expansion of Bank-Credit and False Estimates of Future Earning Power

That a temporary increase in industrial activity results from these practices cannot be denied. Such has ever been the result of speculative promotions and credit inflations. The cause of this increased activity, however, is quite apparent. In each so-

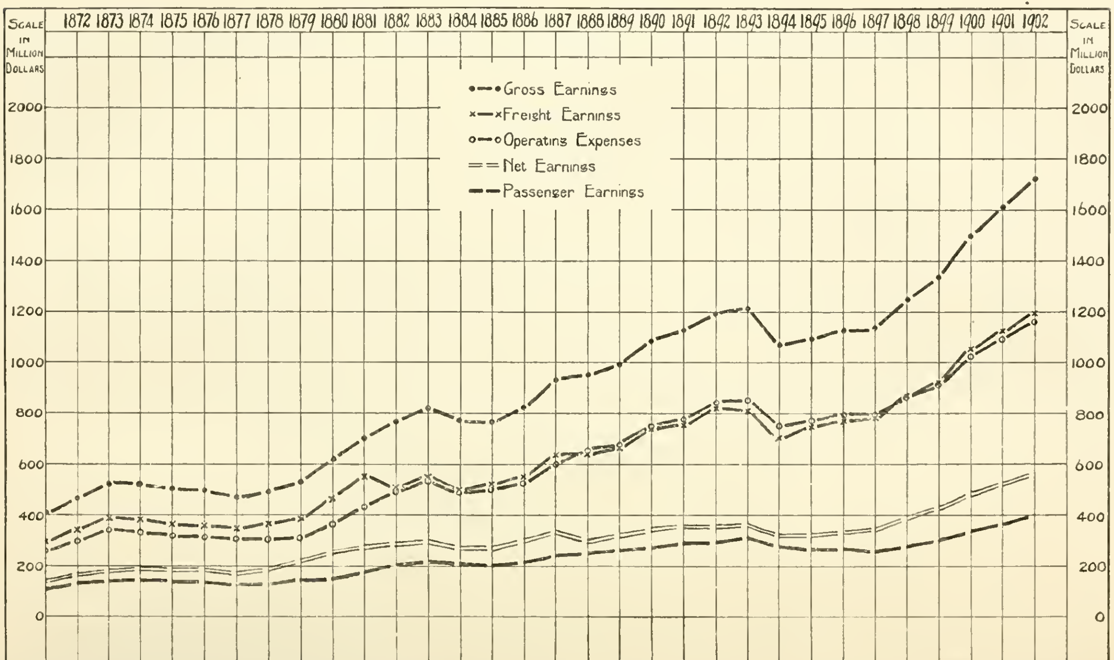
called "period of prosperity" the immense amount of new funds made available for the purchase of properties and equipment through the flotation of securities and the expansion of bank-credit has increased the demand for every kind of material — of construction, of maintenance, and of subsistence. From 1898 to 1903 manufacturers of pig iron could not fill domestic orders, and prices advanced from "$12 per ton in October, 1898, to $25 at the beginning of 1900; steel rails doubled in the same period, the price going from $17.50 to $35; bar iron scored even a greater percentage of gain within a shorter time, the price advancing from 95 cents a hundred in July, 1897, to $2.60 in October, 1899. The quotations of clear pine boards advanced from $45 to $73 a thousand; for brick, from $4.50 to $6; rope, from 5¼ cents to 13 cents, and salt, from 21 cents to $1." Prices were advanced all along the line, in cases doubled and quadrupled.

Credit inflation and rising prices

An increase from four to six billions in the credit-funds within five years — billions, not millions — made available to the country as a means of purchasing new materials and new services, by a simple process of "flotation," operated to put the conduct of enterprise into the hands of promoters who have had little thought for the future. Of what interest was it to the promoter that he was offering prices for materials twice or three times their cost when the funds

False estimates of valuation

III. CHART SHOWING FLUCTUATIONS IN THE BUSINESS OF RAILROADS OF THE UNITED STATES AS INDICATIVE OF GENERAL BUSINESS CONDITIONS



with which to pay for them were so easily obtained? Why should he be concerned with cost of production when his profits were to come from promotion and equipment instead of coming from operations or permanent income on investment? Of what interest is it to merchants and manufacturers that prices are higher when they might sell at advances which would yield increased net profits? These new trade demands and the consequent higher prices of products, based on credit-funds obtained from speculative flotations, temporarily increased the profits of productive enterprise, and these new margins of profit carried speculation in capital shares to a still higher mark; again new market quotations made a new basis for estimates of value of the securities offered as collaterals; these in turn increased the amount of bank-credit made available for higher spendthrift prices; and again there came larger returns in the form of immediate net earnings to plants set in motion at a higher speed with larger equipment for supplying customers' demands. As has been repeatedly demonstrated, this is not prosperity, but the result of a debauched popular judgment recording new increments of wealth by a process of increasing valuation of goods.

No other explanation is needed for the reverse of the foreign trade balance. When American prices are high, instead of having a trade balance to be settled in Europe, exportation becomes so far reduced and

importation so far increased that for months at a time we are forced to borrow from abroad on "finance bills" — or other devices — some form of floating debt incurred by our bankers as a means of meeting the demands of a commercial constituency. After 1898, instead of importing gold, "there has, in spite of the theoretical trade balance, been no significant shipment of gold in our direction," except when forced by temporary loans. More than this, our financial institutions have not had the strength to keep gold on this side. Before the end of 1902 we had begun to lose our gold. At that time conservative bankers pertinently asked: "What of the future?" "If a hundred million dollars' importation of gold can serve as a basis for an expansion of so many millions of dollars of deposits and loans, what will an exportation of $100,000,000 mean?" It might have been added, that in all probability the adverse balances against our financial centres would have resulted in a complete overthrow of our inflated credit system had not the United States Treasury come to the relief of commercial banking institutions with deposits (loans of the Government to the banks) amounting to over $100,000,000; and within four months Government aid to the banks was increased to more than $160,000,000.

Reverses in foreign trade

Banking Crises Due to Credit Inflation

But even with the support given by the Treasury, as events subsequently proved, the credit problem was not solved. The question of the ability of the commercial banks of the country to serve their constituency with current funds (the problem of adjusting the speculative situation and forcing liquidation of speculative loans to such an extent as not to compel them to restrict accommodations to commercial enterprise) kept the New York banker in a quandary by day and, for two years, hung over him like a spectre by night.

The crisis of 1902

With all effort bent toward the common cause; with united action on the part of the commercial banking fraternity acting on the best counsel and combining their united resources with those furnished to the banks by the Treasury, they managed to maintain their financial integrity, although this was accompanied by a long line of forced liquidations. To a large extent the "capitalization" of these new promotions fell on the banks and trust companies and weakened their equipment for the support of commercial credit accommodations.

The cooperation of banks for protection

During the first weeks of January, 1903, with the customary New Year's commercial settlements and payments, there was a relaxation of nervous tension

induced by what had come to be speculative necessity. But the far-seeing read the handwriting on the wall. Summer demands must be provided for; the "finance bills" were coming due and these contributed to an adverse international balance which set up exportation of gold; the character of securities held by American banking houses was not attractive to foreign investors and sales of these could not be utilized as a set-off against foreign balances; moreover, speculative syndicates found it necessary to "buy in" securities offered on the other side below the market here.

Forced liquidation

It is much to the credit of our leading banking institutions that in 1902 a campaign of liquidation was inaugurated in time to allow them gradually to "convert" speculative loans, in anticipation of demands — to make available those forms of holdings which in time of financial strain are absolutely unavailable, but which may be realized on without loss to the banks if pressure is brought on the borrower in such moderation as not to induce panic. By making this pressure a gradual one, all the resources of the speculative public in the market were utilized.

Circumstances favoring the banks

But the effect was deadly. First the margins and accounts of the small speculators were wiped out; then the more resourceful "outsider" was driven to the limit of his means and was forced to suspend

operations; later the contest was carried on between "insiders" and "professionals," the stronger utilizing profits gained from those less able to manipulate the market; but in the end all contributed (through demands to maintain margins on a falling market by sale of stock and by reduction of loans) to keep up the reserves of the banks and protect the credit of New York institutions against exportation demands and against "calls" on reserve loans from the interior.

Effect of liquidation

For two years this liquidation continued. Those banks which had confined their operations to a commercial banking business were able to protect themselves and their customers against serious losses. By fortuitous circumstances, by aid of the Government, and by cooperative action, through their ability to utilize the profits and resources massed by speculators during the five years preceding, those into whose fostering care the national funding system has been given were not driven to measures which seriously interfered with commerce. These resources, however, are incidental, and speculative profits are not limitless; in fact a number of the large operators so far felt the results of parallel reductions in prices and of the confiscation of margins that they can be of no further utility to the banks. It was the bounteous return of a wide expanse of fertile soil and a partial failure of supplies abroad with corresponding profitable returns to the farmer of the South and the

West that saved the day for American financial institutions in 1904.

Falling Prices and Industrial Depression

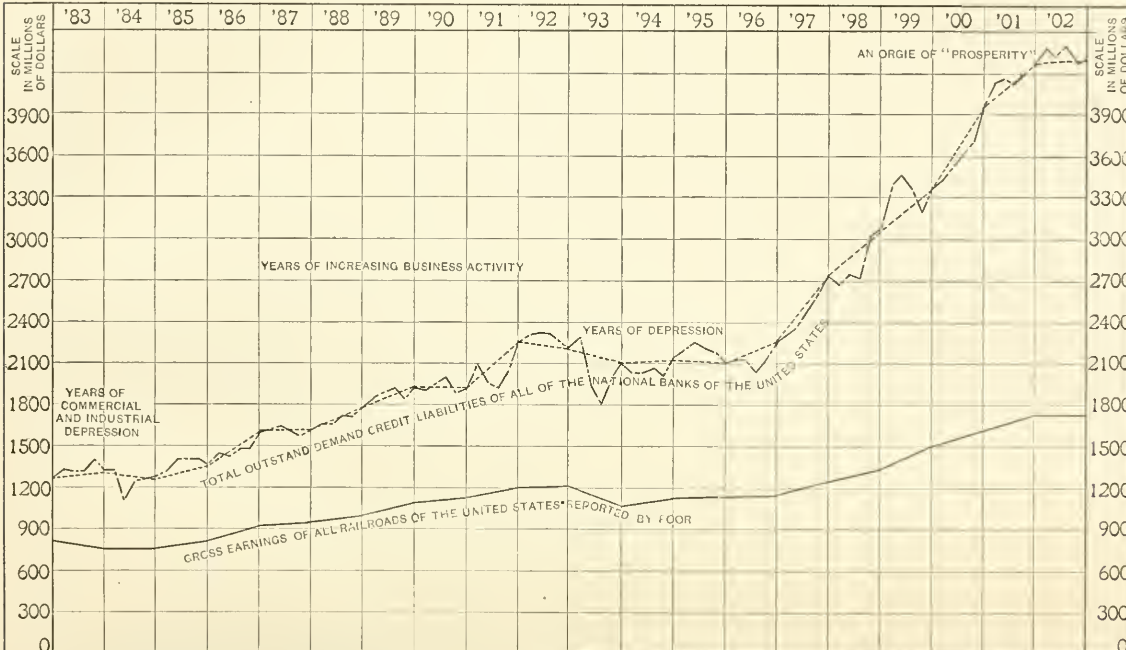
That the financial situation is still a dangerous one is apparent. And the danger lies not so much in a present or in an approaching crisis as in the continued use of a dangerous instrument of commerce. This danger is always present and will be so long as present practices continue. The recurring necessity for adjustments of credit to a lower level has been the chief source of financial disturbances in the past. This has been brought about by the repetition of speculative expansion and subsequent forced credit liquidation. Forced credit liquidations have resulted in declining valuation of assets and a lessening ability to meet credit obligations outstanding.

The scaling of valuations

The basis of credit judgment is estimated ability to pay. This estimate is arrived at by the use of that financial device known as a "balance-sheet," on one side of which are placed "liabilities" and on the other "estimated valuation of assets." The liabilities of a business concern are the "weights" used in adjusting the balances; they are fixed in amount. In arriving at financial condition, "liabilities" are placed on the right-hand side of the scales. Then on the other side of the accounting balance is placed "ap-

Basis of credit judgment

IV. CHART SHOWING THE CORRESPONDENCE IN FLUCTUATIONS IN BUSINESS ACTIVITY WITH INCREASES AND DECREASES OF BANK-CREDIT ACCOUNTS



praisement" or "the valuation of assets." If the amount of the "valuation" exceeds the amount of the "liabilities," then there is recorded a "surplus." If the scales swing in the other direction there is recorded a "deficit." This "surplus" (or "deficit") of value of assets over liabilities is the basis for judgment as to the value of securities and as to ultimate ability to liquidate credit. The basis for judgment of short-time demand-credit, however, is estimated value of "available" or readily "convertible assets;" these are weighed against "current liabilities."

The depreciation or reduction in estimates of value placed on "industrials" alone during the first year after September, 1902, has been calculated to exceed three thousand million dollars. If other securities are included, the most conservative estimate of the amount of depreciation is beyond comprehension, unless we reduce the estimated value of assets to a mathematical comparison with fixed liabilities. With this continuous scaling of estimates of "value of assets," some business concerns have not been able to make the necessary adjustment. Seven of the so-called "trusts" have become insolvent, and ten or twelve others have admitted the speculative character of judgments on which their "prospectus" profits and prospective dividends were based by passing dividends. And, as in former periods of readjustments, depreciation (*i.e.*, the scaling of estimates of value)

Contraction of credit-funds to level of capital support

of securities must continue until the earning capacity of the joint stock institutions has been demonstrated to be adequate to justify investment at a level of valuation which may be maintained.

The greatest public danger to be feared from this sort of credit expansion and contraction is that speculative gains may not be adequate or available to meet demands for credit liquidation when readjustment of the credit load becomes necessary. When the financial balance cannot longer be kept in adjustment by exchange of "securities" owned against liabilities (*i.e.*, by process of cancellation of liabilities of one concern against the liabilities of another), and the weight of liquidation falls on products of industry, in other words, when liquidation is forced into the market where "goods" are disposed of, then it may become necessary to readjust the whole industrial machinery to such a level of capitalization that net profits may give ample return on the capital liabilities represented in the balance-sheet. If this readjustment falls on a period of low productive returns (poor crops and low prices), as in 1893–96, then the reaction and reorganization becomes far-reaching. A period of financial readjustments is what we know as an era of commercial and industrial depression. It was such a condition that we had to face in 1893, after the speculative collapse of December, 1890, and the reorganization continued until 1897. Similar to this

The danger to be feared

was the period of readjustment from 1884 to 1886, after the excesses of 1879 to 1883; and still further back may be found the long depression of 1873 to 1878, after the speculative activities following the close of the War. And although every favoring circumstance has been with us to support the inflated capitalization of the speculation price of 1902, we cannot say that we are yet on a safe and sure financial foundation.

Demands for Greater Elasticity

It is during such periods of credit contraction, and industrial depression that demands for "elasticity" may be found written on the editorial pages of newspapers and financial periodicals. At such time, "elasticity" is the term most often heard in public councils and in private financial discussion. Though frequently used it is a term accepted without definition, and understood by each to mean something that will afford him financial relief. Each person puts into the word a different content: to the man in commercial pursuit "elasticity" means ability to obtain funds for current use in the form of bank accommodation; to the banker it signifies ability to expand and contract his supply of money according to his own needs for payment; others take it to mean the ability of the Government to increase or decrease the general circulation. It is this failure to agree on the meaning

Definition of elasticity

of the first premise of their reasoning that makes agreement on a conclusion so difficult to reach.

A proper understanding of the problem of elasticity must take into account both forms of current funds, viz.: bank credit-accounts (the form of funds used by the business man), and money (the form of current funds necessary to the payment of balances by the banker). To the individual business man or to the individual banker, the problem resolves itself into one of the relation of "available assets" (*i.e.*, assets readily convertible into cash) to "current liabilities," current demands for payment of cash. The exercise of sound discretion, with reference to proposed measures of reform looking toward elasticity, however, requires that we know, not only the character of the demand, but also the financial machinery with which we are at present working and in which the readjustment is to be made.

What is necessary to a proper consideration

Chapter III

THE AMERICAN SYSTEM OF CURRENCY AND BANKING

For years the National Bank Act has been a subject of general condemnation. The system of commercial banking operating under it has been pointed to as a patchwork — as an impotent device that has outgrown its original usefulness; it has been referred to as a financial crutch that from force of habit the country has been leaning on after convalescence. These critics have observed that our system differs from banking systems of Europe and, by analogy, the conclusion is reached that our financial calamities are due to these differences. The champions of the National banking system, however, contend that in the same sense every institution is a "patchwork"; that the Bank of England is founded on and constructed of "patches" of legislation and administration, having grown out of the exigencies of war quite as truly as our own; that the Bank of France has been "patched" till little or none of the original fabric is left; that the Bank of Russia, and, in fact, if cause for criticism be found in this, the financial systems of all countries are to be brought under the same condemnation.

Critics of the System

What the critics of the system have failed to see, and that which is most important, is that each of the great financial systems has been evolved from conditions quite different from our own; that it is from these differences of environment (if a biological figure may be used) that variety has been produced in financial concerns as well as in other forms of business life. Arising out of conditions peculiar to ourselves we have a distinctly American institution — an institution that has been gradually adjusted to our business needs. We have a banking system as distinctly our own as is our factory system, our railroad system, our school system, our Government. In so far as there is demand for change, it is in the nature of a further development of the institution — a further adaptation to meet the growing needs of a fast developing and rapidly shifting business organization. With this statement of differing point of view in mind, it may be well to trace the distinctive features of the American system, then from the vantage ground of the institution and its environment again to take up the thread of discussion as to the new adaptations proposed or that may be thought necessary.

An evolution from American conditions

The Development of American Banking Ideals

At the time that the American colonies became embroiled in revolution with the mother country they

had no commercial banks; they had no agencies of government adequate to financing the necessities of war, and none to meet the demands of a fast growing commerce. As a means of meeting the exigencies of military operations, resort was had to issues of colonial and continental public scrip and to foreign loans. When public credit failed, funds were raised by lottery and by temporary funding devices. Commercial and industrial paralysis left no occasion for organization in aid of private business till after the close of the struggle for independence.

The country emerged from the revolutionary conflict politically independent, but without money or credit at home or abroad. The people were without a currency other than that imported in the form of foreign coin; their paper currency had depreciated to a point that forbade other than speculative trading or barter; they were practically without adequate funds for public or private use. The welfare of the commercial classes on the seaboard demanded the establishment of agencies of commercial credit; the country at large demanded a money that would pass current throughout the bounds of the nation. These two demands were met by the organization of a great central commercial bank — the first Bank of the United States. The circumstances of the time required (1) an agency of such financial vigor and strength as would serve the Government in refunding

The First Bank of the United States

its debt; (2) an institution of national scope such as would give to the people a sound currency; (3) a bank with powers of discount equal to the volume of commercial credit used.

Why the First Bank was not rechartered

With the expiration of the Charter of the first Bank of the United States, however, both of these situations had changed. In the first place, the National debt had been refunded and the Government had been placed beyond necessity other than that which might be met by its current revenues. In the second place, the controlling interests of the people had shifted; from foreign trade to domestic commerce, from support of shipping to the development of land transportation, from merchandising raw materials and foreign products to the capitalization of home industry, from town building on the coast to the development of the resources of the interior the commanding interests of the nation were turned. The mint was supplying a uniform coinage for bank reserves; local banks were supporting local interior development. The first Bank fell with the party with which it was identified — the party of foreign trade, the party that drew its principal support from the seaboard commercial interests.

The War of 1812 was a war directed against the New England coast towns. It was a war of the interior against the East. As against England, it was a failure; as against the East, the interior won a de-

cisive victory; the enormous foreign trade interests of the North Atlantic seaboard were ruined. The National financial system was reorganized with the party of internal improvements and home markets in power. As a means of permanently turning away from shipping interests and encouraging the upbuilding of home industry, the tariff of 1816 was passed. War had served either to destroy or had proved a temporary barrier to foreign commerce. The tariff of 1816 was enacted as a permanent barrier to investment in international trade — a barrier that was raised higher and higher through several successive enactments. Party measures were pushed for the opening of interior transportation routes, and as a means of further strengthening the hands of the administration, the second Bank of the United States was established. The only banks that had remained on a specie-paying basis during the War of 1812 were the banks of New England. The commercial relations of the interior were in a chaotic condition; the Central Government was struggling under a new load of debt; the currency was disorganized and unsatisfactory; Treasury bills were at a discount. A National financial agency was again created, with a capital of thirty-five million dollars, to perform the double function of refunding the National debt and providing a sound commercial currency for the interior.

The Second Bank of the United States

As the Charter of the second Bank neared its close the scene again shifted. Before the Federal Government was in a position to lend adequate aid to the enormous demands from the interior for transportation and internal improvement New York had successfully financed the Erie Canal. With this event begins a new chapter in our financial history.

Reasons for winding up the Second Bank

No longer did local communities look to the National Government as the only agency adequate to carry on the internal improvements demanded. Besides, with the development of the resources of the interior, a new alignment took place which detracted still further from support of National as opposed to State enterprise. The industrial systems of the North and South worked to cross purposes. As soon as the uplands were utilized and cotton was made king the constituency of the cotton and tobacco belt was thrown against the tariff, while the industrial organization of the North and West demanded its continuance.

The tariff contest finally resulted in compromise. Both sections, however, weakened in their support of "National" as opposed to "State" institutions and "State" activities. Internal improvements in each section were promoted from a State or local financial base; the support of a National agency was not needed. The South demanded "States-Rights" a a measure of protection to its industrial and social

system; the North and West likewise organized their internal politics around State functioning, State im-provements, State banking, but held to tariff legislation for protection of home-industry as against foreign competition and as a means of inducing investment of capital in the development of interior resources. In all but tariff issues, therefore, ideals of local self-government carried the day as against the party representing National activities. Jackson rode to power in 1828 as the popular representative of the compromised "local" ideal, while Adams and Clay, representing centralized National functions, failed to retain political support. As a logical sequence, the second Bank — the instrument created to support centralized National activities, the federal institution — perished, and the whole financial system went over to a State basis.

Internal improvements and State banking

But evil days were ahead. The panic of 1837 and the depression following carried down local enterprises. State banks and State flotation schemes of all kinds were brushed away like the paper issues which had preceded them. From the ruins of their own fortunes the people looked out on bankrupt cities, bankrupt towns, bankrupt counties, bankrupt States. Over eight hundred State banks were complete failures, while all commercial credit institutions that survived within the area of the new development

The teachings of financial disaster

went over to a non-specie-paying basis; their issues passed for what they would bring.

At the same time, the National party (the Whigs), by fusion with malcontents and with the "Ultra-States-Righters" — the "nullifiers" of the South — again gained control of the Central Government.

Attempt to incorporate a third Federal bank

Another measure was proposed by leaders for a third Bank to bring order to National finance, to currency and to commerce. But Harrison's death threw the administration into the hands of the "Ultra-States-Righters," the extreme advocates of localism; Congress, representing *National* functions, was powerless; the way was blocked till again *local* interests had readjusted themselves, till strong *local* institutional life reasserted itself in the election of President Pierce.

It was in the midst of this chaos, following the panic of 1837, that the Independent Treasury was established as an institution designed to protect the finances of the Government against becoming involved in transactions and institutions of private-credit. It was out of this same chaos that our new "independent" institutions of private-credit arose. From the working of these two independent systems side by side, from experiment, and from adaptations made to current necessity and to business need, American banking ideals were developed. Before the Civil War had again thrown us into the turmoils

of military contest we had passed through two more financial crises; two industrial depressions brought American banking ideals to the test, and the adaptations then made, as a result, were again along distinctively American lines. With no purpose of reverting to a system of National commercial credit—with ideals of "local" internal improvement and "local" need for capital uppermost, with "local" interests, as opposed to "National" necessity, the force present to give shape to enterprise and form to legislation—"local," "independent" banking in the various States was gradually reduced to a basis of safety and economy.

The local institution retained

The Suffolk system of New England had proved itself adequate to keep bank issues on a specie-paying basis during times of severest strain—had sustained commercial credits when in all other sections they had failed. This was a system devised to protect "local" institutions when the forces of the country and of the Central Government were arrayed against them. From the Suffolk system was adopted the salutary principle of prompt redemption of current demand-credit obligations. The Free-Bank system of New York was distinctly the product of "local" and State as opposed to "National" financial interests; this was the result of the adaptation of "independent" commercial credit institutions to the

Measures to strengthen capitalization

demands for internal improvement and for the development of the latent resources of a politically organized "locality."

By experience, and the application of the test of business necessity and convenience to each new device, the States came to distinguish between the forms of credit used as "money" (forms which were to pass from hand to hand without question) and "bank credits-of-account" (credit-funds provided for private use, created by direct contract with the bank). The "independent" Free-Bank system was adopted by nearly all the States. The safety-fund, and the idea of collaterally secured circulation, was directed toward the correction of the "unsoundness" of the "money" system under a practice of "independent" commercial bank issues; collateral security for notes was introduced to serve the double purpose of giving a market to "local-improvement" stocks and bonds, and at the same time of avoiding the necessity for holding coin reserves against notes outstanding; the safety-fund came to be a marginal coin reserve to insure payment in full in case of failure and on forced sale of securities.

Credit-money distinguished from credit-accounts

The business importance of the distinction between "money issues" and bank "credit-accounts" used as funds found expression in the distinctly different provision for the payment of each of the two forms of demand

Importance of the distinction

obligations of the banks. The "safety-fund" and "collateral security" were devoted entirely to the support of "credit-money," or notes of the banks; a first lien on general assets was also added for further security of bank "money issues." But such provision for the security of the "money-funds" left the bank free to provide or not to provide for the redemption of its "credits-of-account." As a means of protection to book-credits, a "money-reserve" requirement was introduced and a system of inspection was established to protect the people against financial impotence and fraud. The necessity for capital (the necessity for invested funds as equipment for a business institution offering credit-funds to a community) came to be recognized and laws were passed to prevent banking without capital-resources, or what was known as "wild-cat" banking. In all of these adaptations, however, in all of the legislation and provisions for administrative control the leading idea was one of local need, local service, local development, as opposed to "National" necessity or "paternalistic" enterprise.

The Separation of the Institution of Money Issue from that of Credit-Account

Fortunate it was for our financial system that the Civil War occurred at a time when banking ideals had come to be so well crystallized and when the necessity for a common currency had come to be so

generally felt. We were quite ready to have a uniform practice, a common law, a central administration along lines of previously proved experience — a system that would preserve all of the salutary principles worked out under American business conditions, and one which, by uniformity, was adapted to a wider commercial activity. The complete taking over of the money functions by the Treasury, under necessities of war, and the reorganization of our independent commercial-banking institutions under the National Bank Act, were the last steps in the final establishment of the American system of currency and banking.

Establishment of a strictly American system

Chapter IV

NATIONAL CREDIT-MONEY AND THE NATIONAL BANK

Again attention is called to the fact that banking ideals in America had developed from strictly American conditions; that as a result we had worked out a system unique; also that intelligent banking opinion was fairly well settled at the time the nation found itself in the throes of civil strife. We were still suffering from the results of the panic of 1857, and there was engraved on the memories of older bankers the record of failures in 1837 and 1847. The nation also realized, as a matter of experience, that these years of financial failure each had been followed by an era of industrial depression and financial reorganization. It was commonly believed that lack of uniformity in laws, conflicts of systems, and rival advantages offered to incorporators by one State bidding against another, under conditions favoring loose banking practice, had contributed to this confusion. Before the greenback came to take a prominent part in our circulation, the credit-money of the nation, in the form of "notes-of-hand" (issues of State banks), were in such condition that one doing

business was required to keep constantly before him a current list of quotations as to prices of "bills," and then he ran the risk of loss in exchange. Still, the advantages found in the local independent institution for fostering "local" interests were so great that all this confusion and loss could be suffered with scarcely a suggestion of return to central banking — to a central "Federal" institution with its large capital, its branches, and its uniform currency. Even during the War, when Federal ideals were strong, there was no large business interest ready to advocate or even listen to proposals for a central Federal bank. In fact, it was the fear that such might be the outcome of a Federal law which stood for a long time in the way of establishing a uniform National system in conformity with existing ideals.

Confusion in credit-money at beginning of War

Conversion of the Treasury into an Exclusive Agency of Credit-Money-Issue

When the Government found itself confronted by the necessity of supporting armies in the field, when it became necessary to maintain an armament with a fighting force of half a million, when its expenditures amounted to millions per day, it found itself equipped for such an undertaking with an independent (but empty) Treasury, and with a commercial-credit system entirely divorced from the Federal State; the

Issues of Government credit for currency

finances of the country were organized on independent commercial lines rather than on those intended for Government service. The conversion of this empty independent Treasury into an active financial agency to provide current funds for the Government became a matter of necessity, and as the easiest and most expeditious way of providing such funds the Treasury assumed issue functions.

Government credit becomes money standard

The notes (demand-credit obligations) of the Treasury entered into circulation in competition with the mixed and inefficient system of bank-note currency. At first (as demand obligations for the payment of gold and silver) they passed at par. Later, being valued at less than specie-paying bank-notes, they were made legal-tender to give them currency. As an incident to this, the whole commercial-credit system passed over to a Government "paper standard." The banks, failing to provide a "coin-reserve" for the redemption of their demand obligations, immediately accepted the situation. They provided themselves with a cheaper form of legal-tender money for reserves and sold their coin, using instead issues of the Treasury for the redemption of notes.*

At first, from National necessity, Treasury-notes

*This practice became general with banks in every section except the Pacific coast. The practice was systematized in the East by action of the principal Clearing-House Associations; Boston was the last of the large cities to adopt the United States note as a standard for payment. August 27, 1861, that Association voted that any bank which might conform to the agreement entered into by the banks in New York and Philadelphia,

were issued in settlement of demands against the Government; after the issues of the Treasury had been accepted by the banks as a standard for payment of their own credit-accounts the notes of the Government were found preferable to the diversified issues of banks. Government issues at least provided a uniform, and therefore more acceptable form of credit-money. This preferment on the part of the banks, this decision to accept United States notes as reserves, this better service rendered by the Treasury as an agent of money-issue, paved the way to the tax which eliminated the credit-issues of banks from our money circulation.* From that time to the present all our "credit-money" has been issued by the Central Government, the banks confining their credit activities entirely to commercial functions, using the credit-money-issues of the Government for their reserves. From that day to this the American money question has been an entirely separate and distinct

Displacement of the State bank-note

with reference to the National loan, could deposit with the Clearing-House Committee "Treasury-notes" of that loan and receive in exchange certificates of the "loan committee" to an amount not exceeding ninety per cent of the par value of such Treasury-notes. These certificates were to be received at the Clearing-House in settlement of balances. The notes were later adopted as a basis for payment in lieu of "coin."

*True, the ten per cent tax imposed on State bank-notes was the immediate cause of the retirement of State bank-notes. But if the greenback and the National banking system had not been considered more advantageous, the banks would not have withdrawn their opposition to their use and adoption, and, furthermore, would not have voluntarily accepted the change. There can be no doubt that the uniform system of greenbacks and "Government" bank-notes was in every way more acceptable and more serviceable to the people than the complicated, hazardous, and uncertain system of independent bank issues.

one from the American commercial banking problem, and every attempt to treat the two questions without distinction has led to confusion of thought.

The Creation of a Uniform System of Commercial-Credit

In the reduction of our "commercial-credit" to a uniform system the same National necessity was the immediate cause. It was the need of the Government for current funds that reduced credit-money-issues of the country to a uniform basis in the Treasury-notes; it was the continuing public need for current funds that finally gave us uniform institutions of commercial-credit. Secretary Chase saw in the commercial bank the possibility of an enlarged market for bonds. The practice among the States under the Free-Bank system suggested a practical method for utilizing this market.

A national banking system from public necessity

Before this could be done, however, it was necessary to incorporate the many "local" banking systems under National law. But to make such a National system a success would require voluntary consent on the part of both banks and bank patrons. General respect and voluntary consent must be gained through devising a National law that would serve the commercial purpose better than had the mixed and uncertain State-bank systems. The inducement to

Incorporated the best American experience

voluntary consent which Secretary Chase and his advisors offered was a National Banking Law, into which were incorporated all of the most wholesome measures — the best banking ideals that had been evolved during nearly half a century of independent commercial banking experience. These ideals were brought together and welded into a consistent plan — one that commended itself both to bankers and to established business interests.

The manner in which this law represented and still represents the "local" ideal is caught from the language of ex-Comptroller Dawes, in a recent speech before the Kansas Bankers' Association: "It has been built up, not from some central institution combined with numerous branches which discourage the banks in small towns, but has been built up from *fifteen thousand differentiated banking units*, until in banking, as in other great industries of these United States of ours, is coming a day of commercial domination of the world. It is the little men whom we have protected in this Government." The National banking system is a part of that National policy evolved "to let the little men get on in the country, in order to let the little bank get into operation, in order to let the little manufacturer get into operation, and to not cut off from their credit those people who, starting from small beginnings, have brought us into this great prosperity which we all enjoy and which is so

Organized around local, banking needs

widely and evenly distributed throughout this great country of ours."

The American System of Sound Money

The American *credit-money-system*, in its final evolution, is essentially a system of Government obligations for the payment of gold on demand. In the effort of the American people through the last century to obtain a "uniform" currency, the Independent Treasury has been maintained, and has finally become the only institution of credit-money-issue. Uniformity of valuation of all our money-issues is secured through this central institution by a process of immediate redemption. In the interest of "sound money," and as a provision directed toward meeting the demands for gold payment arising out of these credit-money-issues, a gold-reserve is set aside in a special department of the Treasury known as the Department of Issue and Redemption. Here is kept the $150,000,000 gold-reserve; here all demands for gold obligations arising out of credit-money-issues may be presented and honored; here, in fact, and in practice, all forms of money are made interchangeable. If the holder of silver wishes greenbacks he may exchange silver for notes; if he has gold, and for convenience wishes silver certificates, these may be had; if he has any form of money other than gold, and wishes standard money, he may obtain this in ex-

Credit-moneys issued and redeemed by the National Treasury

change, at par, without discrimination. Thus every form of money is issued by the Treasury, and all forms other than gold are made demand obligations for gold payment. Furthermore, the means of meeting these obligations are at hand: first, in the form of a "reserve" large enough to meet current demands, and, second, by making the credit-money-issues redeemed a first lien on the general resources and revenue powers of the Government. These credit-money-issues of the Treasury are made legal-tender for the payment of commercial-credits.

The American System of Banking

The American banking system, on the other hand, is essentially an independent institution of commercial-credit. It has for forty years been entirely divorced from money-issue functions, except as an agent of the Government for the conversion of bonds into demand notes. The service that it renders is one of furnishing commercial credit-funds to its business constituency in the form of book-credit accounts.

An independent system of commercial-credit

The legal-tender "credit-money-issues" of the Government are contracts to pay gold coin; the "commercial-credit-accounts" offered to the public by the banks are contracts to pay legal-tender money. The Independent Treasury protects the "credit-money" system by maintaining a "reserve" of gold. As

Comparison of money and banking systems

all the reserves and the revenue power of the Treasury are organized for and directed toward the maintenance of a convenient form of legal-tender money in its integrity, so it is intended that the commercial bank shall protect its "demand-credit-accounts" by keeping a money-reserve adequate to meet current demands, fortified by all the capital-resources of the bank. It has come to be recognized that the bank's service to the country is not one of "money-issue." When money is needed, a customer cares not whether it is in bank-notes, greenbacks, gold certificates, or notes of 1890, so long as it is "sound;" *i.e.*, so long as he knows that he may obtain gold or something as valuable on demand. He may obtain "money" as cheaply from a Treasury office as from a bank.

The public service of the bank

The chief service of the bank is one of purchasing good, sound, commercial paper offered for sale in the community as a means of obtaining funds to meet the current needs of enterprise, and (as the most convenient form of funds) to be able to give "good, sound, commercial bank-credit" in return. Under a system which permits the banks to issue notes-of-hand, the reason that the bank gives to its customers funds in this form is that it is to the bank's advantage to do so, and not because the customer prefers the bank-note to Government issues. But the American business public has found that, in over ninety per

cent of its business, funds in the form of a "bank-account" are more convenient to the customer, and they have seen fit to take away from the bank the power of money-issue in the interest of public safety. Under our system, the commercial bank, being deprived of credit-money-issue privileges, renders two services: (1) It furnishes a market for commercial paper; (2) it furnishes a form of credit-funds more convenient for use than money itself.

Need for soundness in bank-credit

But the public is quite as much interested in knowing that the credit-accounts of banks will remain "sound" — *i.e.*, will be paid on demand in "sound" legal-tender money of the Government — as it is that the Government shall furnish "sound" legal-tender money, for under the law of greater economy, over nine-tenths of the business is done on this form of obligation when protection is given against "unsound" banking. The method employed under this unique American system of independent commercial banking is to require banks to maintain their capital-resources unimpaired, and to keep a "reserve" of legal-tender currency sufficient to protect the accounts which they have sold to the public for business use. When thus protected we have a system of credit thrice compounded: (1) a system of Government "legal-tender credit-money-issues" based upon the gold standard; (2) a system of "commercial bank-credit-funds" (book-accounts) based on legal-tender

money; (3) a system of "business-credit" looking to the bank-account for means of payment. It is the current opinion that under the American system, through the Independent Treasury, we have already secured to ourselves a "sound money"; the problem now before us is one of securing for ourselves "sound commercial bank-credit."

The So-called "Issues" of National Banks

To this conclusion and summary one objection will be urged, viz., that the banks called National banks have retained issue functions. This contention will not be admitted, and in this lies one of the minor financial fallacies of the time. As an institution of commercial-credit, our National bank is not a bank of issue. It would be as logical to call banks, which deposit gold and receive in return gold-Clearing-House-certificates, banks of issue; it would be as justifiable to so regard a State bank or private bank that has deposited gold, silver, or currency in the Treasury and received certificates to represent them. Bank-notes, it is true, are at present a form of money, but, for the issue of these, the bank occupies a position of agency of the Government for the conversion of bonds into notes. The note-issue power was not intended as a means of meeting a commercial demand; it was given purely as an accommodation to the Government for its own ends. As a

Banks an agency of the Government for bond conversion

means of creating a bond-market when the Treasury was in need of coin the bank was allowed to buy coin bonds, *i.e.*, to exchange gold, or gold market equivalents, for bonds; then (on depositing the bond thus purchased with the Government as security to a promise to deliver a definite amount of money to the Treasury) the bank obtained a form of paper money, called "National currency" or bank-notes, for use in its business, receiving the interest on the bond as an inducement for the exchange.

The Government issues the bank-note in the same sense that the Clearing-House issues Clearing-House loan-certificates. These notes are not bank-credits issued in the course of a commercial banking business. The value of the note does not rest on the credit-contract of the bank, but on a contract with the Government which in turn rests on the collateral securities deposited with the Treasurer, *i.e.*, on Government credit. The notes were not "issued" by the bank, but were purchased or borrowed from the Government, and as a form of money the immediate cost to the bank is more than that of any other form of money obtainable.

Government issues notes to the banks

It is therefore thoroughly misleading and tends to involve the subject of currency and banking in mystery to speak of this form of currency as bank-money. It is quite as misleading to attempt to align this practice with any experience under other systems of banking in discussion of "elastic bank-

issues." Under the American system the National "bank-note" is a form of money issued by the Government to and through the bank as a corporate agent of the Government.

Chapter V

THE DEMAND FOR A "SOUND" AND "ELASTIC" SYSTEM OF BANK-CREDIT

The solution which we have given to the problem of "sound money" has been by taking our money-issues entirely out of the hands of private concerns and putting them under a department of Government. By so doing, however, we have left our "commercial-credit" entirely in the hands of private individuals and corporations. That greater elasticity is needed and that some change should be made in the National Bank Act to this end, all are agreed. Opinion differs only as to what the character of this change should be. And this difference grows out of a difference of view as to the method by which elasticity in credit obligations may be attained without restricting business accommodations.

Opinion as to need for greater elasticity

Two Schools of Banking Opinion as to Method of Obtaining Elasticity and Sound Banking

Proceeding from the assumption that greater elasticity is needed as a common point of departure, argument has gone out on two distinct lines; bankers

have divided into two schools of opinion diametrically opposed. The one has reached the conclusion that "branch-banking" and "currency based on commercial assets" will secure the desired end; the other has as zealously urged "independent banking" and "credit-accounts" (deposits) based on independent and adequate capitalization. On examination of the arguments used by these two schools there appears not only the fundamental difference in their appreciation of the relation of the problem of "elasticity" to financial "soundness," but the reasons for this divergence in conclusions as to the remedies to be applied are also apparent. Taking premises for argument there has been a wide difference in their conception of the "system" to be modified, and also a lack of agreement as to the form of "bank-credit" to which elasticity is to be given.

Points of difference

The "Commercial Assets" Banking School

Mr. Eckels, representing the ideas of the "branch-bank", "commercial assets banking" constituency, has refused absolutely to take into account the fact that we have in America a system that has grown out of American conditions, and therefore one that must be considered from the standpoint of further adaptation to American financial and industrial interests. He and his followers show that branch-banking has produced good results in other fields, and conclude

that it would also produce equally good results if grafted upon our own industrial plant. They show that the bank-note circulation of England, Scotland, Ireland, Germany, Canada, etc., has adjusted itself to increased and decreased business demands for current funds; it is therefore assumed that the English or the Scotch or the German branch-bank would work here better than our own system of decentralized, independently capitalized banks.

Character of their claims

This reasoning from analogy might have been put with convincing force if they had first shown that the American business demand and the American banking system were the same sort of demand and a system similar to those from which their analogies are taken. Their fundamental error lies in failure to appreciate that there are no parallels in either. In the first place, the discussion is not with reference to an English system of banking, a Scotch system or a German system; what we have to do with is an American system. In the second place, the form of "bank-credit" demanded by the American business man is not a bank-note, but a "credit-account" for the use of the customer of the bank. To show by direct quotation Mr. Eckels' line of departure: "Commerce wants (1) a *note-issue* which is sound, and (2) one which from day to day in its volume *meets*, not only in the cities of great commercial undertaking,

Fallacy of reasoning from analogy

but upon the frontier and in sparsely populated places, *the needs of the people* in their transactions, . . . *in their transferring of property from one to another*." This is the first premise in the reasoning of the "commercial assets banking" school.

All admit, and our whole past history supports the conclusion, that the American people wish a "sound" credit-money when they wish credit-money at all; but it is affirmed by Mr. Eckels' opponents that his assumption is wrong when he further says that the American people wish a "note-issue upon the part of the bank." This, it is urged, is what the American people have been drifting away from since 1837, and what they completely abandoned forty years ago. The American people have not seen an "issue" of a bank — using the word in the same sense that Mr. Eckels uses it in his analogies drawn from Canadian and European practice — since the Civil War. The school which he represents fail to appreciate the fact that the American people have completely divorced their system of "credit-money-issue" from their system of "commercial-bank-credit."

Note-issues for the use of the banks

The "Capital Assets" Banking School

The other school is ably represented by Mr. Dawes. While in a measure this school has failed to appreciate the full import of the institutional distinction between the American and other systems,

in their reasoning about "elasticity" they have proceeded from a proper appreciation of the form of circulating medium demanded. Quoting from Mr. Dawes for a statement of this view: "What is the most important function of a bank? It is not the *note-issuing* function . . . the most important function which banks exercise in any community is that of producing purchasing power [credit-accounts of customers] in that community. . . . By that method through those simple operations of banking [the purchasing of commercial paper and giving to the customers, in exchange, accounts on the books of the bank], there has been built up in this country to-day a purchasing power of something over nine billion dollars, whereas the total amount of Government money in circulation — gold, silver, and paper — is about $2,250,000,000. It is the check and draft circulation against that tremendous credit balance which furnishes the currency [current funds] with which over ninety per centum of our total transactions are done. . . . We have in this country the most elastic currency which the world has ever known, in this check and draft currency. . . . Did you ever think how elastic the check and draft currency of the United States is? Why in the year 1900 the clearances of the city of New York alone were thirty-one billions of dollars — not millions — thirty-one

Bank-accounts used by business community

Elasticity in credit-accounts

billions of dollars greater than they were in 1897, and they were five billions of dollars less in 1900 than they were in 1899. Just think of the elasticity of that magnificent currency which has been built up in this country by this system of differentiating banking among the fifteen thousand banks scattered over these United States."

Recognizing that the chief service rendered by the commercial bank is one of providing its customers with credit-accounts (deposits) for business use, this second school of banking opinion have strongly impressed on their faith, that there is at present no limit to the elasticity of the form of funds in current use except that imposed by the bank itself; elasticity is limited only by the amount of capital support given to accounts outstanding. They strongly advocate increased financial "soundness" as a remedy for inelasticity, and as a means to this end they further advocate the principle of banking on the "capital resources" of the bank instead of doing business with "issues" based on "commercial assets."

Limit to elasticity imposed by banks themselves

Since the exchange of credit-accounts for commercial paper is the chief business of the bank, and since these credit-accounts (deposits) are the chief form of funds used in the community, the underlying premise of their belief is that the first duty of the bank is to make these credit-accounts "sound." Soundness

The limitation one of "soundness"

is here used in the same sense that it was understood to mean in the recent money controversy. The bank-account is sold to the customer (or exchanged for his note) to be used as current cash in his business. What the customer wants to know is that it is as good as gold. And what the bank must do to insure this result is to be able to redeem its credit-contract on demand.

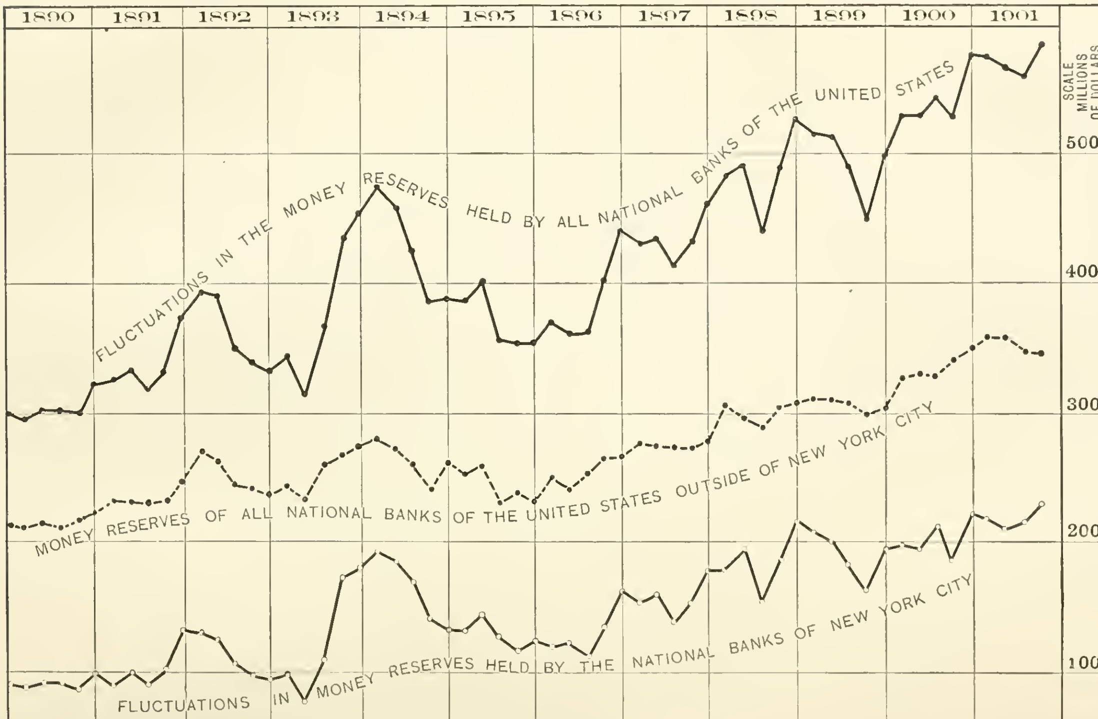
The "Soundness" of a Bank's Credit

There are two ways in which credit-contracts may be met; viz., by "payment" and by "settlement." *Payment* is the satisfaction of a *credit obligation* by delivery of the amount of money contracted for. *Settlement* is the satisfaction of a contract for future delivery by a new contract or acceptance, in lieu of delivery or payment. Ability to *pay* depends on the ownership or possession of money, or something which can be converted into cash, for delivery when the credit-contract is due and demand is made; ability to *settle* depends on the power of the one obligated to offer something which will be acceptable to the creditor in lieu of legal-tender money.

Two methods of satisfying a credit obligation

In campaigns for currency and banking reform, these two methods of satisfaction of credit-demands have been the first premises of the two opposing schools of financial thinking. Recurring periods of relapse from speculative excess, cycles of decreasing

V. CHART SHOWING FLUCTUATIONS IN THE MONEY DEMANDS ON ALL NATIONAL BANKS OF THE UNITED STATES, AND BY CLASSES



assets and proportionately increasing liabilities, have caused issue to be joined between them. The school which have pleaded for reform based on ability to *pay*, have styled their argument a plea for financial "soundness." The school which have urged measures for *settlement*, without being required to fulfil their contracts for future delivery of money, have been characterized by their opponents as "inflationists." But, whatever may be chosen as terms properly to represent these two financial creeds, it must be recognized that each is an attempt to solve the problem of liquidation — the one, by the introduction of methods which will insure a larger proportion of assets to credit issued, the other, by a provision for new issues of credit liabilities to meet those already outstanding. It may be further observed that, in all of these contests, the one school have stood for the strict fulfilment of existing contracts, and have sought to protect business against the evil of *future* excesses of credit-issue, while the other school have sought to obtain relief from a *present* emergency, arising out of demands for the delivery of money on existing contracts of credit.

The dividing line in campaigns for financial soundness

In 1893–96, attempt was made to solve the problem of liquidation by establishing 371.5 grains of silver as the standard of payment of existing liabilities and for the valuation of assets. With the price of silver as it then stood, this device would at once

have doubled the proportion of assets to credit liabilities, and would have made liquidation easy. Two successive political campaigns recorded victory for the gold standard; and all future doubt as to the ability of the Government to liquidate its credit-money obligations, by *payment* according to the standard, was set at rest by *increasing* the assets of the Government available to meet gold demands. These questions are now considered settled, but a new period of liquidation brings with it a similar controversy with respect to the credit-accounts of commercial banks. On questions of public policy, opinion is again divided between the same schools, representing the same ideals that have contested for supremacy throughout the last two centuries.

The sound money controversy

The Demands of the Two Schools of Banking Reform

A re-statement of their respective demands may lend clearness to the presentation of contending faiths. To give greater facility to the liquidation of bank-credit liabilities, the one school argue: (1) for authority to issue new promissory notes in *settlement* of credit-accounts outstanding; (2) for a first lien on the general assets of the bank to secure the ultimate *payment* of these notes; (3) for the abolition of the Sub-Treasury; (4) for the "deposit" of all revenues of the Government in the commercial banks, without

Demands of the "commercial assets" banking school

collateral security; (5) for the right of banks to establish branches, without requiring a proportionate increase of capital-resources to liabilities.

Arguments supporting these demands

The arguments offered in support of these several demands are in brief as follows: (1) That authority to issue notes will relieve the banks from the necessity of obtaining legal-tender money for delivery in time of unusual demand for liquidation of bank-credit, and will thus relieve extraordinary pressure on the money market; (2) that a first lien on the general assets of the bank, to secure the ultimate *payment* of notes issued in *settlement* of outstanding credit-accounts, will keep the bank-note as "sound" as the issues of the Government, and will protect it as well as if secured by a deposit of Government bonds; (3) that the abolition of the Sub-Treasury system will prevent money being abstracted from the regular channels of trade when there is a surplus of Government revenue over expenditure; (4) that by "depositing" the revenues of the Government with the commercial banks, these "deposits" may be used to support still larger volumes of credit-accounts, and increase the available funds of the community; (5) that by a system of branch-banking, capital will be given greater "fluidity," — *i.e.*, the money of the bank may flow from one part of the country to another as it may be needed.

Answering these contentions, the other school of

banking opinion urge that all this is a plea directed towards weakening the capital-resources of the banks on the one hand, and for permission to avoid *payment* of credit-accounts outstanding on the other. Further enlarging on these views, they argue that authorization to issue new notes in *settlement* of demands for delivery of money made on-account is a means of avoiding *payment*, and in its effect not only prevents such a readjustment of assets to liabilities as is necessary to "sound banking," but tends toward a still larger inflation of credit, at the very time when assets are being scaled by the exercise of more conservative judgments of valuation — *i.e.*, when ability to convert assets into cash for delivery on credit-demands is being reduced. It is also pointed out that the security offered for note-issues, in the form of a lien on the general assets, not only decreases the need of capital-resources, but at the same time tends to weaken still further the support to bank-credit-accounts — the kind of funds in most general use — and to weaken public confidence in the whole banking system; the immediate effect of this weakened confidence is to lessen the opportunities of the bank to render a service in the community out of which it obtains its revenue. They urge that the Sub-Treasury, instead of being an element of weakness, is an element of strength in two ways: *first*, by segregating the public funds, the necessity for larger bank capi-

Arguments for "capital assets" banking

talization is increased; and, *second*, by storing up an independent reserve in time of low money-demand, an independent money-reserve is at hand which may be made available to the banks in time of monetary strain. In support of this last contention, they point to the wholesome influence of the Sub-Treasury in the recent disturbances, such as the Baltimore and St. Louis panics, at which times the bank situation might have proved disastrous to the business of the whole country, had it not been for the aid of the Government.

As to the so-called "deposits" of Government-moneys in the banks, they show that these are nothing more or less than loans to the banks without interest. In this relation, it is further urged that the only reason why the Government or anyone else should purchase a bank-account is to obtain funds for current use in a form more convenient than money; that the only need of the Government for such funds is represented in the accounts of disbursing officers — about $6,000,000. They hold, therefore, that the ever-increasing loans of the Government to the banks (in the early part of 1904 amounting to about $170,000,000) put a premium on their relying on the paternal support of the Treasury, instead of depending on their own capital-resources for the cash needed in the liquidation of their own accounts — *i.e.*, for money-reserves. Again, it is urged that

Increased "elasticity" through increased capital strength

the demand for branch-banking is inspired by this same motive — the desire for still further lessening the capital cost of doing business, which, if accomplished, would result in again weakening the need for capital contributions by the stockholding proprietors of banking corporations.

This second school would secure elasticity in quite another way. Their underlying principle is expressed by Mr. James G. Cannon: "Bankers sometimes plead for more elastic currency, but what is needed is more elasticity of the assets of the bank; what is wanted are *assets* that are readily convertible into cash in time of panic, which will *pay* depositors, and at the same time permit new loans." This

Adequate capital-resources the solution

statement sets out in strong relief the irreconcilable premises of the two classes of thinkers; the one urging a right to *increase liabilities* still further when their assets are already inadequate to support outstanding demand-credit; the other urging *an increase in capital-assets* — those assets readily convertible into cash without curtailing loans.

Chapter VI

THE RELATION OF BANK CAPITALIZATION TO THE PROBLEM OF ELASTICITY

Although the relation of capitalization to the problem of elasticity is an indirect one, its importance has been overlooked by those who have had remedies to propose. As before observed, "elasticity of credit-accounts" and of banking accommodations is the desideratum; and elasticity of credit-accounts depends on an adequate equipment of the bank with "available" or "convertible" capital-resources. The assets, which are available without "forcing" or curtailing loans, are those that are obtained by capital expenditure; in fact it may be said that this is the chief end for which the capital of a banking institution is obtained. The provision of "capital-assets" instead of "commercial-assets" as a basis for bank-credit (whether in the form of notes-of-hand or bank-credit-accounts) is the essential distinction between the "wild-cat banking" of the past and "sound banking."

Distinction between "wild-cat" and "sound" banking

This is another way of stating the controversy between the two schools of banking opinion represented

by Mr. Eckels and Mr. Dawes. While it may not be said that Mr. Eckels favors "wild-cat" banking (*i.e.*, banking without capital), the conclusion reached by his critics seems warranted that all of his proposals are in the direction of weakening the capital support given to asset liabilities outstanding. An application of his proposals, therefore, would be in the direction of wild-cat banking. Mr. Eckels argues for banking on "commercial-assets," *i.e.*, making the current credit obligations of the bank depend on the convertibility of loans and discounts, which in turn would depend on the convertible assets of customers. The school represented by Mr. Dawes contend that the current money-demands arising out of the credit-accounts used by the bank to purchase commercial paper should be met by the bank itself out of its own capital; *i.e.*, the second school referred to argue for banking on the *capital-resources of the bank* instead of banking on the *convertible assets of the community*, to which the bank has sold its credit to be used as current funds.

Banking on the capital of the bank

Principles of Banking with Respect to Capitalization

The reasoning of this second school is based on the assumption that the purpose of bank capitalization, as in all business enterprise, is to provide funds with which to procure permanent equipment. This

assumption cannot be denied; it must be accepted as axiomatic. The financial process called capitalization is the creation of a permanent fund for a permanent use. The reason for obtaining funds for permanent equipment by capitalization is to avoid the necessity of constantly refunding — a need which is a continuing one. This being generally accepted, the only question that remains is: What are the permanent needs — what is the equipment necessary to safe banking?

Capitalization of permanent needs of banks

Their second premise is that the business of banking is one of furnishing "current funds" to its customers in the form of non-interest-bearing credit. This must also be accepted. The customer obtains these credit-funds by selling to the bank his own interest-bearing note, or some other form of bankable asset. The earnings of a bank are derived from exchanging these non-interest-bearing credit obligations, which are used in the community as current funds, for good commercial paper purchased at a discount or with interest accruements.* The amount of earnings depends in large measure on the amount of good commercial paper the bank is able to buy with its credit-accounts — *i.e.*, profits depend on the amount of credit-accounts (so-called deposits) pur-

Needs determined by nature of business

*This form of statement is not entirely in accord with the more recent practice whereby the banks are paying interest on their own accounts (deposits). But in such event, the rate must necessarily be lower than that paid by the customers for loans. In any event the result is the same.

chased by customers by means of their own interest-bearing obligations and bankable assets.

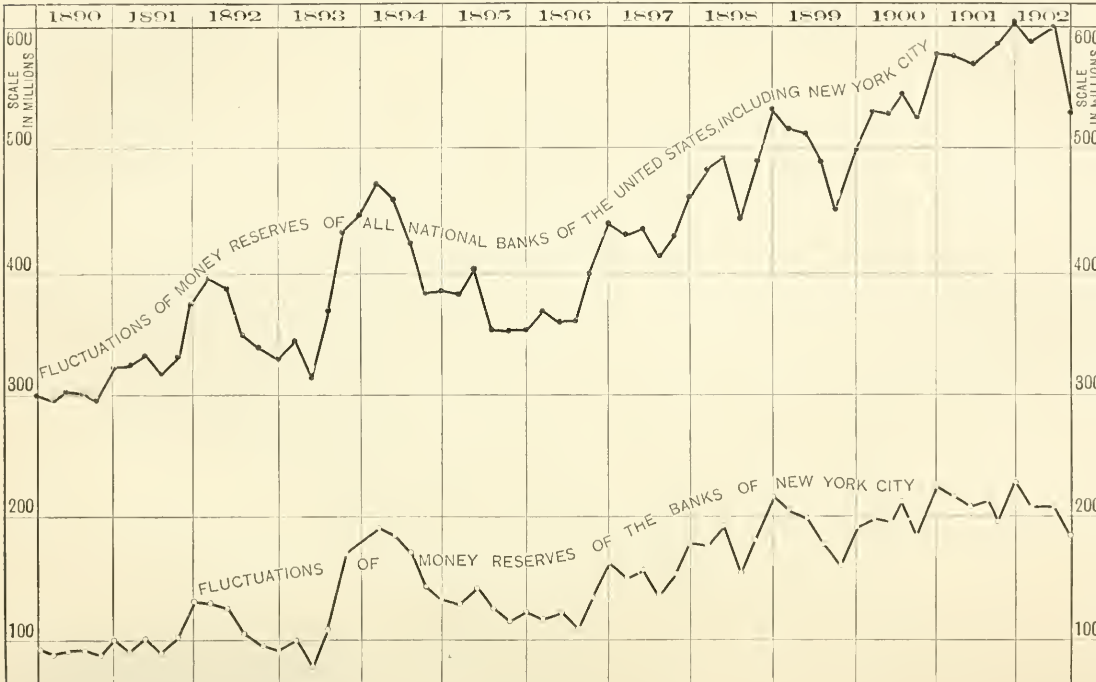
The permanent need of a commercial banking institution is a need for *money* and for *assets readily convertible into money;* this equipment is necessary as a means of supporting outstanding credit-accounts sold to customers. And if a bank has in mind the principle of elasticity in providing accommodation to the community which it attempts to serve, the amount of capitalization of a bank should be sufficient to support and protect its credit-purchases of all good commercial paper offered by those who wish to use credit-accounts. The bank holding itself ready at all times to purchase all good paper offered by those who carry so-called "deposits" should have "capital-resources" large enough to meet all demands for money on the credit-accounts created and issued to customers in exchange for commercial paper, without calling or re-discounting its loans. Or, to state the conclusion of the second school categorically: *Capitalization should be sufficient to meet every money-demand on the amount of banking (credit-account) business done.*

The amount of capital needed by a bank

If there were no variations in the amount of credit used, then a money equipment large enough to meet money-demands on this constant volume of credit-issues, pending voluntary liquidation, would be the only equipment needed. But the fluctuations of de-

Fluctuations in credit-demand

VI. CHART SHOWING THE UNIFORMITY WITH WHICH THE MONEY DEMANDS OF ALL NATIONAL BANKS OF THE UNITED STATES ARE REFLECTED ON NEW YORK



mands for current bank-credit are continuous; the proportion of money-demands to credit outstanding is also variable. These fluctuations come from the shifting prosperity of customers; they come also from the fluctuating demands of a business community from season to season.

It is found by experience, however, that the demand for current funds (*i.e.*, the amount of good commercial paper and other bankable assets offered to the bank in exchange for accounts) varies with considerable regularity. The money-demand may likewise be closely approximated. In highly mercantile communities the experience of a bank may show a recurring ebb and flow of credit four times a year — the largest demands coming semi-annually; in certain agricultural communities there is a rise and fall twice per year; in others, the loans and accounts cumulate and are reduced by voluntary liquidation only once in twelve months. The amount of capital needed under such circumstances, unless the bank intends regularly to shift the burden by re-discount, is an amount that will provide a safe money-reserve for the support of the largest volume of credit-accounts (so-called deposits) carried during the year.

Ability to capitalize fluctuating demands

No greater fallacy existed in banking circles than the one so often stated — that a certain percentage of "cash" to deposits is the only equipment necessary to sound banking. This form of reasoning has led

to strange results. In time of minimum demand, the money-reserves are allowed to run low in proportion. By assuming that this is the only form of equipment needed, the bank has no resources from which more money may be realized, when demands are larger, without calling loans or restricting credit accommodations. Again, in attempting to determine the amount of money-reserve needed, it may be found that in one institution less than ten per cent is actually used. The bank having such an experience recognizes that it is not good business to carry a money-reserve of twenty or thirty per cent. This would be as foolish as for a coke company to build twice or three times as many ovens as it may ever hope to use. The clause of the National Bank Act which allows the banks to "deposit" their surplus money-reserve is a contradiction in itself and a recognition of this folly. But those who are responsible for this law engaged in two other fallacies, viz.: (1) that the so-called "deposit" is not a sale of money; and (2) that the asset obtained on sale of surplus money is a readily convertible "invested-reserve."

Equipment needed to meet fluctuations

The wide variations of demands for money from time to time on the accounts of customers make two forms of equipment advantageous, viz.: (1) a legal-tender "cash-reserve" of such amount as will protect the bank against all current demands, including de-

"Money-reserve" and "invested-reserve"

mands of customers for money and demands of banks on exchanges; (2) an "invested capital-reserve" which will produce an investment income when money-demands are small, but which may readily be *converted* into "cash"* in time of need, without forcing the bank to sell its commercial paper or call in its loans.

The Kind of Capital Equipment Necessary to Elasticity

As a basis for further discussion of the relation of capitalization to the problem of elasticity, the following illustration is given. A bank with a share-capital of $100,000 and a surplus of $25,000 may provide equipment for itself, as follows:

Capital-Resources

Banking house		$5,000
Redemption equipment:		
1. Cash-reserves:		
(*a*) Exchange balance	$10,000	
(*b*) Money-reserve	60,000	
2. Invested-reserve	50,000	120,000
Total equipment		$125,000

Capital Liabilities

Capital stock	$100,000
Surplus	25,000
Total capitalization	$125,000

*"Cash" is here used to mean legal-tender "money" and "accounts" with banks for purposes of redeeming exchanges, but not to include "loans" to banks at interest even when these loans are in the form of open accounts not used for the redemption of credit obligations. See subsequent treatment of "loans to reserve agents," etc.

With these capital-resources and with this redemption equipment of $120,000 the bank may purchase commercial paper and other bankable assets with its own credit-accounts as follows:

Commercial Assets

Loans and discounts, etc.*.................... $466,666.66

Commercial Liabilities

Accounts of customers (*i.e.*, deposits) $466,666.66

From the above it will be seen that the bank in question has used all its capital in the purchase of equipment, that is to say: (1) $5,000 was used to provide a banking-house, furnishings, etc.; (2) a redemption equipment made up of a "cash-reserve" of $70,000 and an "invested-reserve" of $50,000 — *i.e.*, capital-resources amounting to $120,000 were set aside for the protection of the credit transactions of the bank with its customers. In the above showing, $466,666.66 of "demand-accounts" are represented as outstanding; these have been used to purchase $466,666.66 of commercial paper.* It thus appears that there is a "cash-reserve" amounting to fifteen per cent of the outstanding customers' accounts

*It is not to be presumed that all accounts are created by the purchase of commercial paper. Much of the accounts are created by "deposits" (sales) of money, checks, and drafts, etc., but generally speaking the money, checks, and drafts deposited with (sold to) a bank will be used as set-offs against withdrawals, and the customers' accounts (deposits) will very nearly equal commercial paper held — *i.e.*, loans and discounts. If the capital funds are kept separate and apart and the investments to be used as capital-equipment clearly distinguished and unimpaired, the "commercial assets" account and the "commercial liabilities" account will be very nearly equal.

(so-called "deposits") and that there is an added "invested-reserve" of ten and seven-tenths per cent.

Let us assume that this bank is located in a Western cattle country, and that the demands of customers for current funds fluctuate from $300,000 to $700,000 during a year — also that a fifteen per cent money-reserve (a much larger money-reserve than is usually necessary) is found adequate at all times to satisfy current demands for money. During the cattle shipping season the loans would, by voluntary liquidation, be reduced to $300,000; at such times only $45,000 in "cash-reserve" would be needed for safety. With the capitalization above represented, therefore, $65,-000 of the redemption equipment of the bank might be invested in some kind of readily convertible asset that would produce an income. Gradually, as the season progressed, the ranchers would bring in new cattle-notes to exchange with the bank for accounts. Safety would then demand an increase in the "cash-reserve"; this (the cash-reserve) might then be recouped out of the "invested-reserve"—*i.e.*, out of the unencumbered capital-resources. When the commercial-paper-assets and current-accounts-payable rise to $700,000 the "money-reserve" (by sale or by hypothecation of "invested-reserves") would be increased to $105,000 (fifteen per cent of outstanding accounts-payable) and still leave a ten per cent margin of "invested-reserve." That is, $45,000

Capital adjustments to demands

of the capital-resources in the form of "invested-reserves" might be hypothecated with a ten per cent margin in collaterals without sale of the invested capital-reserves (or they might be sold) in any market where money might be had on favorable terms, and the amount of the money so purchased might be transferred as an exchange balance to the Western bank. With such an equipment, the bank, doing business under the conditions assumed, would enjoy an elasticity in cash-reserves equal to the full capitalization, less amount invested in banking-house and fixtures; it would also enjoy an elasticity in customers' accounts equal to more than five and one-half times its total capital. This elasticity might be attained and at the same time the bank might keep invested at interest all of its capital which is not actually needed as a "cash-reserve" to meet current demands on credit obligations outstanding.

Elasticity a result of capital adjustments

Chapter VII

THE PUBLIC CONTROL OF COMMERCIAL BANKS

One of the principal functions of government, so far as it undertakes to control banks, is to protect the customer against an impairment of banking capital; to this end periodical reports are required. Question is raised as to the efficiency of present methods of control and as to the degree of protection given to purchasers of credit-accounts of banks. Preliminary to this inquiry three questions must be answered before any proper appreciation may be had of the possibilities of public control as a means of protecting the public against an "unsound" and "inelastic" circulating medium, viz., (1) what are the powers of control given by the National Bank Act? (2) Under the Act, what are the purposes for which control is to be exercised? and (3) in the exercise of powers granted, what devices or means may be employed by the Comptroller to reach these ends? These preliminary questions having been disposed of we then will be fairly abreast of our topic.

Powers of Control Given by the National Bank Act

The first of these inquiries may be answered by direct appeal to the language of the Act. Section

No. 87 of the National Banking Law (Section 5211, R. S.) contains this specific mandatory declaration: "Every association [*i.e.*, National bank] shall make to the Comptroller of the Currency not less than five reports during the year, according to the form which may be prescribed by him." This general provision is supplemented by grants of specific power to the Comptroller, which enable him to call for other reports as often as he may desire, and to obtain such information as he "in his own judgment" thinks necessary "to a full and complete knowledge" of financial condition; a bank failing or refusing to comply with such request is liable to a penalty of $100 per day (Section 5213, R. S.). It would appear, therefore, that the Comptroller is not lacking in authority to obtain any and all information which may be necessary to administrative supervision. A further reading of the National Bank Act quite as concisely forces the conclusion that the Comptroller has all the power necessary to a complete control over National banks and their operations, as to all subjects which are properly within the range of official discretion; this power extends even to the taking possession of the bank itself and winding up its affairs for failure to comply with his demands.

The Purposes for which Control is to be Exercised

This brings us to consider the second question raised, viz.: the subjects of official discretion under

the Act, or the purposes for which official control is to be exercised. It has repeatedly been affirmed that the prime purpose of the National Bank Act was to create a better market for Government bonds when the National credit needed support. In the midst of civil strife when the financial resources of the nation were strained almost to the point of bankruptcy, it was conceived that a very large part of the capital employed in commercial banking enterprise in the United States might be utilized to support the Government. The plan proposed was an old one — one in which the banks (being induced to use their capital to purchase Government bonds receiving the high rate of interest then paid on National loans) would be permitted to use "notes" with which to carry on their banking business. By this device it was thought that the financial strength of the banks might be brought to the support of the Government, *i.e.*, that the State banks might be induced to bring over their capital into a new National system where it might be utilized in the manner indicated.

To make such a scheme acceptable, however, two conditions must be met: The first result of such a plan of support to the bond market would be a large increase in the money circulation of the country and this note would not be received unless it be made as sound (*i.e.*, as valuable) as the money then in current use — the greenback. But this is not the only condition

Conditions necessary to the adoption of the Bank

that the Government must reckon with. In the experience of the past, business had suffered quite as much from unsound bank-credit in the form of customers' accounts (or deposits) as it had from an unsound currency. National reaction against "wild-cat" banking had but recently forced the several State systems over to a basis of capitalization and official inspection to protect the people against wholesale fraud and bankruptcy. If these State institutions were to be brought into a National banking system — if the Government was to utilize their capital-resources to fund its own necessities — the new National system must carry with it all the provisions for safety and for the protection of the public against the speculative devices of the unscrupulous that three decades of the legislative reaction had evolved. Wild-cat banking was banking on "commercial assets" without adequate capitalization. From 1837 to the time of the Civil War the whole trend in banking ideals and in banking legislation was toward the strengthening of banking equipment. It had been found from bitter experience that a bank which was not properly capitalized (and which, therefore, did not have capital-resources sufficient to support its credit transactions) was as dangerous to those coming into business contact with it as was a mine or a factory whose construction was faulty and whose machinery was overcrowded. To the public, the poorly equipped bank was much more

dangerous than the mine or factory by reason of the fact that, in case of collapse, a much larger number of people were constantly within the danger line. After two years of agitation and amendment and compromise an acceptable law was enacted.

Guarantees for "sound currency" and "sound banking"

Under the Act the note was to be secured by a collateral deposit of the bonds purchased; and those holding the credit-accounts of the bank were to be protected by provisions which required what was thought to be adequate capitalization before business should be begun, and the exercise of official supervision to prevent "impairment of capital" during the period that business should continue. It was for the purpose of enforcing these two provisions of safety and security that the Bureau of the Currency was created and a Comptroller was appointed.

Means by Which Control May Be Exercised and the Ends of the Act Reached

The two purposes of control

The functions of the Comptroller have a direct relation to the conditions above described. The first, or, as it was then viewed, the prime purpose for which public control was to be exercised was to guarantee the soundness of the new National currency. This is clearly expressed in the first clause of the Bank Act which recites: "There shall be in the

Department of the Treasury a bureau charged with the execution of all the laws passed by Congress relating to the issue and regulation of a National currency secured by United States bonds; the chief officer of which bureau shall be called the Comptroller of the Currency. . . ." The second purpose of the appointment of a Comptroller is set out in various subsequent portions of the Bank Act, viz.: to insure adequate capitalization — (1) adequate capitalization as a condition precedent to commencing business, and (2) adequate capitalization at all times to secure customers against loss through "impairment."

Control to insure sound currency

That the "National Currency" which was to be issued through the agency of the banks might be as sound as the standard money (*i.e.*, that all forms of money-issues might have a common valuation) provision was made that the bonds purchased by the banks might be hypothecated with the Treasurer as collateral security for final payment and redemption of notes outstanding. According to the provisions of the Act the Government was made a trustee for the benefit of note-holders. For each \$900 of notes turned over to the bank by the Government for issue, the Treasurer was to hold a non-interest-bearing account with the bank secured by a \$1,000 bond. The obligation of the bank to the Government was for the repayment of \$900 in bank-notes or legal-tender

money at its own option. The Government as trustee was the legal owner of the bond. The beneficiaries were (1) the note-holders to the amount of notes held, and (2) the bank for the amount of the current income on the bond and for its equity of redemption. This plan of National currency having been adopted, when a bank issued a note the customer took it, as before observed, not on the credit of the bank, but as a beneficiary in the trust-security held by the Government. The note-holder never inquired as to the credit of the bank through which the note was issued, but relied entirely on his claim against the security held in trust by the Treasurer. Since both bond and greenback were Government credit the National currency secured by Government bonds was taken by the public to be as good as a greenback. Later, when both greenbacks and bonds were redeemed in gold, this National currency came to be considered as good as gold.

Unimportance of this function

As a means of control (to secure the soundness of the circulation or National currency so issued), therefore, the function of the newly created bureau was to see that the trust account of the bank with the Treasurer was kept amply secured, and that the bonds held as collateral security were sufficient for this purpose. But all the data was at hand for determining this fact, and the bonds themselves being in custody, the services of the Comptroller in his capac-

ity as guardian of the currency became merely nominal and perfunctory. Moreover, for this service no report was necessary to control.

Not so with the second function exercised by the bureau — the protection of those who held open accounts (or deposits) of the bank; its importance was correspondingly increased, but not in its bearing on original capitalization. As at the beginning, the method of ascertaining whether the bank had the requisite capital-resources to commence banking operations has remained one of inspection and not one of financial report. The Comptroller must know that at least fifty per cent of the amount of the authorized capital-stock is actually in hand in money, and that the balance of the stock subscription is good, so that it may be realized in ten per cent monthly instalments.

Importance of control to protect depositors

The most difficult duty which the Comptroller has to perform, and the one of increasing importance to the financial world, is that which pertains to the security of the public against the "impairment of capital-resources" during the period that the bank continues in operation. Knowledge as to this feature of the work must come largely from the reports made by the banks themselves, as the number of examiners is grossly inadequate to report more than a check on some of the main items of account. It is from

Capital as a support to "deposits"

this duty that the present inquiry takes its chief bearing.

Protection of the Public Against Impairment of Capital

To state more specifically some of the questions that the Comptroller must have in mind in asking for reports with respect to capitalization: Section 5202, R. S., provides that "No association at any time shall be indebted, or in any way liable, to an amount exceeding the amount of its capital-stock [capital-resources] at such time actually paid in, and remaining undiminished by loss or otherwise, except on accounts of the nature following: (1) Notes of circulation; (2) Moneys deposited with or collected by the association; (3) Bills of exchange or drafts drawn against money actually on deposit to the credit of the association, or due thereto; (4) Liabilities to the stockholders of the association for dividends and reserve profits." Section 5203, R. S., specifies that "No association shall, either directly or indirectly, pledge or hypothecate any of its notes of circulation for the purpose of procuring money to be paid in on its capital-stock, or to be used in its banking operations or otherwise; nor shall any association use its circulation notes or any part thereof in any manner or form to create or increase its capital-stock [capital-resources]." Section No. 5204 recites that "No

Specific assignments of duty to Comptroller

association or any member thereof shall, during the period it shall continue its banking operation, withdraw or permit to be withdrawn, either in the form of dividends or otherwise, any portion of its capital [capital-resources]." Again, in Section No. 5205, R. S., the law requires that "Every association which shall have failed to pay up its capital-stock, as required by law, and every association whose capital-stock [capital-resources] shall have become impaired by loss or otherwise, shall, within three months after receiving notice thereof from the Comptroller of the Currency, pay the deficiency in capital-stock [capital-resources] by assessment upon the stockholders pro rata for the amount of capital-stock [capital-liability] held by each."

Need for an analytical report

All of these, and other assignments of duty with respect to the protection of customers against impairment of capital, make necessary official inquiry into the relation of capital-resources to capital-liabilities — they require a special inquiry as to the capital-resources at hand. For the purpose of determining whether or not the capital equipment of the bank has become impaired through "loss" on account of banking operations or "otherwise," a keenly analytical report is necessary. To properly execute this function of control it is necessary to distinguish the capital-resources and liabilities from the other assets and obligations of business.

The Present Value of the Report to the Comptroller as a Means of Control

In taking up the "form" of report made by the banks to the Comptroller, attention will be confined to the question of determining whether or not the capital-resources have become impaired. An examination of financial statements, as at present made, will disclose the fact that no attempt is made to distinguish "capital"-resources and liabilities from the assets and obligations "current" to the business.

No attempt made to distinguish capital-resources

An Analysis of Banking Resources

For the purpose of determining the financial condition of a going concern, it has become an established principle of analysis that capital-resources are all those properties and assets which are intended for permanent or continuous use in the business. Two principles of administration are well settled: (1) to prosecute an enterprise successfully it is necessary to provide the management with equipment adapted to its purposes; and (2) whatever property, equipment and stock or working assets are permanently or constantly needed, should be provided out of capital investment. As before suggested, this is the purpose for which capital is needed. The proper equipment

Equipment to be provided by capital investment

of a business is necessary to success. As a matter both of financial advantage and of financial safety, this equipment should be provided out of capital. To attempt to provide permanent equipment out of temporary loans, or floating debt, is to hold the enterprise in constant jeopardy. This is as true of a bank as it is of a railroad or of a mine, and this is the underlying thought of the law.

Again, to restate a currently accepted definition, the current assets of an enterprise are those which are acquired, not for equipment or continuous use in the business, but those which are acquired in its current transactions — *i.e.*, in the course of current operation for profit. The purpose of current assets is realization, or conversion. Current liabilities are those incurred in current transactions. It is to fund the temporary needs — to meet the current expenses — to provide funds to carry these current assets and current transactions — that a floating debt is contracted.

The "commercial assets" obtained on current account

If the principles of financial analysis commonly employed in accounting are applied to the assets and liabilities of National banks, conclusion may be reached as to whether or not the capital-resources have been impaired; also, whether or not the permanent equipment is adequate to support its operations with safety to those who may be in business contact with the institutions under examination.

What Are the Capital-Resources of National Banks

The reports, as at present made to the Comptroller, are not based on such a system of analysis, and, therefore, any attempt at rearrangement to this end must in a measure be unreliable. But taking the various items of resource exhibited as a basis for present discussion, a fair approximation may be reached: (1) "Banking-house and fixtures" are unquestionably capital-resources. (2) "Real-estate," in contemplation of law and from every point of business reasoning, should be charged against capital.

Analysis of capital outlay

(3) The bank invests its capital in bonds to secure circulation, and receives on the collaterals deposited notes which may be used in the business — the "margin" of capital invested in these collaterals should be considered a capital charge; the same is true of the "margins" invested in the collaterals deposited to secure Government deposits. (4) The "money-reserve" is essentially a capital-reserve; it is the principal redemption equipment necessary to support the current credit-accounts (deposits) outstanding — the resource necessary to meet the floating debt of a business, whose chief transactions are the purchase of current assets by use of its own current credit-accounts. There can be no doubt that the "money-reserve" held by a bank should be a direct charge against capitalization, and is made so by legal enact-

ment — the only question with reference to this class of items pertains to the interpretation to be given as to what properly constitutes "money-reserves." (5) The accounts which it is necessary for a bank to maintain to provide for its out-of-town "exchanges" are likewise assets permanently needed and in continuous use; it should therefore be counted as a part of the necessary redemption equipment. (6) Finally, the unencumbered securities and other direct investments of capital owned and held by a bank as a means of strengthening its cash-reserve should be regarded a part of its redemption equipment and a charge against capital-resource. These must be so considered for the reason that the direct application of capital to the purchase of "securities," or for that matter even to the purchase of commercial paper, is not banking. There can be one purpose only for making such purchases, viz.: to keep the capital which is needed to support credit transactions invested in income-producing assets when not needed in the form of "cash." "Securities" must be considered either as redemption equipment held in reserve or as an investment which is a charge on capital and therefore a deduction from capitalization for banking. The same is true of all other direct investments of capital. A bank which engages in buying and selling "securities," in "underwriting flotation," or in other business not in the nature of banking, needs to have a larger capital than an insti-

tution which does not so engage itself. Whether the capital investment be in banking equipment, or in other assets and business ventures, the amount of funds thus engaged by the banks should be set up as capital-resources or charges against the capital provided for doing business, the protection of which is the chief end of control.

These several classes of assets being in the nature of charges against capital, the duty of the Comptroller (under the National Bank Act) requires: (1) that an examination of the assets be made to ascertain what may fairly be counted as capital outlay for banking equipment, and that this be compared with the amount of capital provided for use of the institution under examination; and (2) that an examination of current assets be made to ascertain whether there have been any losses suffered in the prosecution of the business, since all "bad loans," etc., must be charged against capital.

Examination to ascertain capital impairment

The accounts exhibiting capital put into the business are found on the liability side of the balance-sheet. The capital provided for use in the business is represented in three controlling accounts, viz.: "Capital-stock," "surplus," and "undivided profits." Of these, the first two items are to be a permanent reserve or liability in the business, and the third must remain in it so long as there is any question as to the impairment of capital-resources.

Accounts exhibiting capital provided

Before any comparison may be made for the purpose of determining what character of investments have been made of capital put into the business, the statement of assets reported by the banks must be assumed to be based on a proper valuation, or a critical examination must be had. For this purpose the Comptroller may supplement the report made by the bank itself with the report of his examiners in whose field the bank lies, or may detail a special examiner if the case seems to warrant such an assignment. In any case, however, a distinction must be made between the current-accounts and the capital-accounts.

Provisions made for appraisement of assets

Classification of Balance-Sheet to Show Financial Condition

Intelligent judgment as to the character of equipment provided by a bank by capital investment requires a classification of resources. The exercise of official discretion with reference to the integrity of capital-resources, which proceeds from the examination of financial reports, makes a classified balance-sheet a necessity. To the end of establishing a basis for the further discussion of "the financial report as a means of control," and at the same time of showing some of the difficulties which stand in the way of the exercise of effective control under the present form of report, an analysis of the consolidated statement

Consolidated statement for State of Iowa

of all the National banks of the State of Iowa for September 9, 1903, is here exhibited. The classification submitted is not offered as a model in the arrangement of items. Neither is the assignment of inadequacy of the present set form intended to reflect on Comptrollers past or present. The form now used is, in effect, that which has been employed by officers of banks for a century; it has been engaged by comptrolling officers of Government since public examination first began. To suggest that a change might be made to advantage is not therefore to be considered as offered in the spirit of reflection on official conduct, more than a proposed amendment of law would imply legislative incapacity.

Not engaging any spirit of personal criticism, and holding in mind the difficulty of doing more than to suggest that a classified balance-sheet is essential to a consideration of the topic assigned, the statement of capital-accounts opposite page 94 is modestly offered as a tentative arrangement.

Attempting to show the amount of capital put into the business, and to account for its investment, in the exhibit below it is assumed that the valuation of assets represented in the reports of the Comptroller is conservatively made, and that there are no "bad loans" to be written off. But even with this assumption, and for this purpose, the form of report made by the banks to the Comptroller renders many of the items doubtful: (1) In the statement of "premium on

bonds" as one element in the computation of the amount of capital locked up in "margins" there is no way of distinguishing this from premium on "bonds on hand"; (2) in the "cash items" it is of frequent occurrence for banks to include expense vouchers which are to be held till the end of the month; in so far as these were included, the statement of the amount of "cash-reserve" is too large. (3) The amount stated as "balance kept with banks for exchange" must be roughly approximated, as no specific inquiry is made in the present form submitted by the Comptroller to determine this fact. The amount of Clearing-House exchanges held are $141,-000; assuming that the amount of exchanges outstanding against the banks under consideration averages $175,000, and further that the average exchanges against "outside" banks are not greater than those against clearing-house banks, and this would seem conservative; assuming further that on an average it requires three days for outside exchanges to be presented and paid, the average balance needed to be kept for the redemption of exchanges would be $525,000. Again assuming that the "outside" money demands for exchange were not more than one-tenth of the local demands for money, and taking this as a basis for estimate, the exchange account necessary would be $548,799; this is taken as the amount of the account with "reserve agents" which

Doubtful items due to form of statement

STATEMENT OF UNAVAILABLE CAPITAL INVESTMENT AND OF BANKING EQUIPMENT FOR ALL NATIONAL BANKS OF THE STATE (IOWA), SEPTEMBER 9, 1903, COMPARED WITH CAPITAL FUNDS PROVIDED IN THE BUSINESS

Capital Investments and Equipment

I Unavailable capital investments		
(1) Banking-house, etc		$2,103,300
(2) Real-estate		347,775
(3) "Margins."		
(a) Amount invested in collaterals		
(1) U S bonds for circulation	$8,742,010	
(2) U S bonds for deposit	2,391,100	
(3) Other securities for deposit		
(4) Premium on bonds (?)	313,006	
(5) Five per cent fund in Treasury	424,880	
Total investment	$11,870,996	
(b) Less cash received		
(1) Circulation	$8,690,245	
(2) U S deposits	2,324,773	
Total avails	$11,015,018	
Capital invested in "Margins"		855,078
Total unavailable capital investments		$3,307,053
II Redemption equipment		
(a) Money-reserves		
(1) Cash items (?)	$475,236	
(2) Bills of other banks	481,461	
(3) Frac currency	36,515	
(4) Specie	2,086,260	
(5) L. T. notes	2,498,104	
(6) U. S. certificates of deposit		
(7) Due from U. S. Treasury	8,512	
	$5,487,907	
(b) Balances kept with banks for exchanges (?)	548,799	
Total "cash reserves"	$6,036,706	
(c) Unencumbered securities.		
(1) Securities owned		
(1) U S bonds on hand	$18,400	
(2) Stocks, etc.	3,147,380	
Total	$3,165,780	
(2) Less encumbrances.		
(1) Bonds borrowed	$53,210	
(2) Bills payable (?)	624,500	
(3) Other liabilities	79,816	
Total	$757,526	
Amount invested in unencumbered securities	$2,408,254	
(d) Other "reserve" investments.		
(1) Loans to "reserve agents"	$10,142,925	
Less amount due to "reserve agents"	18,377	
	$10,124,548	
Total redemption equipment		$18,569,508
Total amount investments and equipment		$21,966,051

Capital Funds in Business

I — Capital stock	$14,881,550
II — Surplus	3,533,641
III — Undivided profits	2,085,923
Total capital funds provided in the business	$20,501,114
Amount of equipment used, not capitalized	1,465,5[illegible]7
Amount of funds employed in the business	$21,966,[illegible]

is carried for redemption of outside exchanges. The remainder of the "reserve agent" account is considered as "loans" to other banks at interest and is included in the "invested-reserve." These amounts are arbitrarily set up, but as they are both in the nature of capital charges the arbitrary division is not important. (4) Under the head of "encumbrances" on "securities owned" it is assumed that the "bills payable" and "other liabilities" stand as encumbrances on stocks, bonds, etc. This is true to the extent only that these liabilities are based on stocks and bonds hypothecated as collaterals, and in so far as this is not true the account would be varied by an exact return such as might be obtained from the bank. (5) The amount exhibited as "loans to reserve agents" is stated on the assumption that the purpose of such investment is to have a quickly convertible asset by means of which cash may be obtained when the money-reserve runs low — a bank making a statement to the Comptroller under a form calling for these specific items of capital-resource might set up some other form of asset as a "direct capital investment." In each and all of the items above mentioned there are elements of doubt — elements which require questions to be raised, but each of which might be made certain by a different form of inquiry submitted to the banks by the Comptroller in seeking for a classified statement of capital investments.

But assuming for the purposes of present discussion that the above analysis of capital investment were true to the facts, let us see what use might be made of such form of report. In the first place we may seek to eliminate those investments which are not in the nature of redemption or banking equipment. The building in which the bank is housed need not be owned by the bank itself. The banking business is a credit business; primarily it consists of the exchange of bank-credit for commercial-credit at a profit. Investment in a building does not strengthen the concern in its current-credit relations. Many of the largest banking institutions do not own a building. The prime purpose of capitalization being to provide equipment with which to supply funds to the community in the form of demand-credit, any use of capital to purchase a building must be considered as an extraneous investment not available for the support of the credit of a going concern. "Real-estate" belongs to the same class of investments. This has been so often said that it has become axiomatic in commercial banking circles. The "margin" invested in the securities hypothecated with the Government are also not available to the business as a going concern. All of the above classes of assets are important as assets for final liquidation on "winding up," but to a "going concern" they are purely voluntary and ornamental and

Unnecessary capital outlays

bear much the same relation to the business of banking that the gilded dome on the Congressional Library does to the value of its literary stores within. Whether or not in contemplation of law this amounts to an impairment of capital, the fact remains that $3,297,053 of capital invested in this way has weakened the banks of Iowa as "going concerns" to that extent.

Outlays for redemption equipment

Another class of considerations attaches to the remaining classes of capital investments — those resources used to support the banking transactions themselves by redemption of credit obligations on demand. Assuming that the banks had made return of redemption equipment as above exhibited, the Comptroller as an agent of the Government should know whether this equipment is adapted to the use for which it is intended. The unencumbered securities, for example, being intended for an invested-reserve to strengthen the cash-reserve held to support demand-accounts (deposits outstanding), the question pertinent to this use is: Are these securities immediately convertible by sale or hypothecation without loss of principal? If, again, any of these are held as the result of underwriting, this fact would suggest that a portion of the bank's capital was being employed in business other than banking and there would be an impairment in use if not in valuation. Such part of the bank's capital as is used for under-

writing should be placed among the unavailable assets. Further than the specific inquiries made as to the character of redemption equipment, comparison may be made of total capital outlay with capital liabilities, to ascertain whether the equipment had been provided by means of capital or on floating debt. By some such classification increased facility would be given to many other official inquiries directed toward the protection of the people against the impairment of the capital-resources needed by a going banking concern.

Chapter VIII

A POINT OF CONTROL NOT ADEQUATELY COVERED BY THE NATIONAL BANK ACT

While the National Bank Act is very specific as to powers of control directed against the "impairment of capital" there is another element of banking strength or weakness quite as important that has been neglected; viz., the protection of the customer against overburdening the equipment used. Judgment as to safety must be made not alone with respect to the absolute strength of material used in construction and equipment, but this having been determined it then must be compared with the weight or strain that it is to support. To be more concrete, every facility is given to such inquiry as the Comptroller may desire to make to protect the capital put into the business against deterioration, but almost no provision is made for official inquiry as to whether the credit burden imposed by the bank officers on this equipment in the prosecution of the business is greater than it can safely bear.

Need for determining the credit load

There is no provision made for correlation of capital equipment with the credit liabilities incurred in the course of its business. These must be met on demand, and safety requires that they should be met by capitalization. This is an essential to sound banking as contemplated in the National Bank Act. Banking activities are represented in its current assets acquired and the current liabilities incurred in banking operation. To concretely exhibit this class of financial results, reference will again be made to the summary for the State of Iowa above used in the statement of capital accounts.

Current Assets (Less $000,00) — Acquired in the Course of Banking Operations

I. — Due from Banks and Bankers:		
(1) Due from National Banks	$2,698,877	
(2) Due from State Banks...	1,058,726	
(3) Clearing-House exchanges	141,352	
		$3,898,955
II. — Commercial assets:		
(1) Loans and discount	$62,159,426	
(2) Overdrafts...............	1,121,025	
Total	$63,280,451	
Less notes rediscounted..	105,267	
Net commercial assets		63,175,184
III. — Miscellaneous:		
(1) Revenue stamps....................		1,020
Total current assets		$67,075,159

Accounts Representing Banking Operations

Current Liabilities (Less $000,00)— Incurred in Banking Operations

I. — Due to Banks and Bankers:		
(1) Due to National Banks..	$2,362,481	
(2) Due to State Banks.....	4,257,426	
(3) Due to Trust Companies, etc....................	3,258,966	
	$9,878,873	
Less amount incurred for equipment purposes ..	1,465,537	
		8,413,336
II.—Commercial Credit Accounts:		
(1) Individual deposits	$58,606,777	
(2) Deposits of U. S. disbursing officers	42,586	
		58,649,363
III.—Miscellaneous:		
(1) Dividends unpaid....................		12,460
Total current liabilities............		$67,075,159

Means of determining equipment strength

From the two summaries exhibited,—the one of "capital accounts" (p. 94), and the other of "banking transactions" (above),—it appears that by means of a capital investment of $20,501,114 a banking business of $67,075,159 was carried on. With these results in mind let us determine, in so far as we may, what strain was brought on capital equipment. In the first place, on what part of the equipment does the banking strain come? As before observed, it is at once apparent that no part of the credit strain falls on the first three classes of equipment enumer-

ated, viz.: (1) "Banking-house and fixtures." (2) "Real-estate" and (3) "Margins." From the point of view of the demands of commercial banking these are purely a gratuitous use of capital. Ownership of a house and furnishing is unnecessary — this paraphernalia may be leased and the rent charged to current expenses, and when a building is owned it is in the nature of a real-estate investment; "real-estate" owned is an encumbrance on banking capital and not banking equipment; the "margins" invested in bonds used as collaterals for notes and deposits are incidental to the system devised by the Government to strengthen its own credit, and as such are not banking equipment — they are a further encumbrance on banking capital.

Three classes of redemption equipment

The equipment necessary to banking transactions is the "cash-reserves" or "such invested capital-reserves as may readily be converted into cash" and which may be used to meet demands on outstanding credit-accounts without curtailing commercial accommodation. As a means of carrying on a business which consists in the exchange of bank "credit-accounts" for "income-producing assets in the nature of commercial-credit," the bank must establish and maintain a reputation for meeting its credit-accounts on demand. The only way that this may be done with safety to its customers is by having capital-resources in the form of "cash" when demands are made.

The real test of banking strength, therefore, is to be found in the redemption equipment: (1) in the "cash-reserve" — cash in hand and exchange-balances — and in "invested-reserve" — "unencumbered securities" and "other capital investments" readily convertible into cash. Again assuming the valuation of these capital-assets to be conservative, the strength of banking equipment of the State of Iowa by this method of analysis, at the time stated, was $17,104,061.

But a comparison of strength of equipment with the credit strain upon it must be arrived at by bringing the two results together. The total demand obligations for the payment of money were in round numbers $68,500,000. That is, the redemption equipment (after deducting reserve loans uncapitalized) being $17,100,000, and the total amount of demand-credit to be supported $68,500,000, the inverted pyramid would be $68,500,000 — $17,100,000. But in getting at the amount of the strain that will fall on the capital-resources this gross amount must be reduced. Eliminating by set-off the current institutional assets and liabilities, the relation of credit outstanding to capital-assets would be $62,500,000 — $17,100,000. In other words, $17,100,000 invested in banking or redemption equipment has permitted the banks of Iowa to purchase about $62,500,000 of interest-bearing commercial assets by

The test of credit tension

means of about $62,500,000 of their own credit-accounts supported by this equipment. Through banking operation, the corporations have a gross income about four times as large as they would have by direct investment of their capital in commercial paper, and have furnished to the community credit-funds which do the work of money of equal amount.

Need for control as a means of safety

The purpose of control is to make such a business safe, and the differential of safety must be drawn from experience, leaving an adequate margin of protection to the public against contraction of the circulating medium as well as to protect customers against immediate loss from non-payment. The need for a better correlation of capitalization with equipment and banking operations carried on may appear the more vividly by comparison of the several classes of banks reported. (*See next page.*)

Assuming that for the purpose of accounting for capital investment in redemption equipment the cash on hand is to be a first charge against capital (this not being an income-producing asset and of first importance in the support of credit), in so far as may be determined from published bank returns, the foregoing summary shows the disposition of capital invested in the banking business in the various classes of banks represented. From this it would appear that while in a single agricultural State like Iowa the banks by their own capitalization have

Exhibit of Capital Investments by Classes of National Banks, September 9, 1903

(Stated in Millions of Dollars.)

Classes of Items	All National Banks	Banks Outside of Reserve Cities	Reserve City Banks (second class)	Central Reserve City Banks (first class)	New York City Banks
Unavailable Capital:					
Investments (Banking-Houses, real-estate and margins)	$186	$101	$42	$43	$38
Redemption Equipment:					
Cash-Reserve:					
(1) Money	605	183	147	248	177
(2) Exchange account	61	18	14	–	–
Invested Reserve:					
(1) Securities	446	237	116	–	–
(2) Other reserve investments	12	159	2	–	–
Total Capitalization*	$1,310	$698	$321	$291	$215

* The amount stated as capitalization includes capital stock, surplus, and undivided profits.

Inadequacy of capital investment

provided the funds to procure a large part of the resources used as redemption equipment to support their outstanding credit, taking all of the banks of the United States this is not true; they have provided capital enough for "cash-reserves" and for "securities" actually held, but they have provided almost no capital for direct investment in "loans to reserve agents." The banks in reserve cities (of the second class) are in about the same relative condition as those of the country at large, in so far as

these items are concerned; absolutely they are in a much weaker position on account of the importance of their "reserve loans" not capitalized. The banks of the central reserve cities (the "cities of the first class"), however, have not sufficient capital to provide themselves with the current "cash-reserves" used in the business, and which are required of them by statute, to say nothing of securities owned; the amount of "cash" which such banks are able to provide through capitalization is only 24.2 per cent of their net banking liabilities. Assuming that all of their capital were retained in the form of cash, there would not be enough to provide the amount actually on hand by $27,000,000 — this part of the redemption equipment, together with the funds necessary to provide all other forms of equipment carried, had been borrowed. Assuming that the equipment actually carried is needed, then the banks of reserve cities have obtained $292,000,000 of their equipment on floating debt.

If we take the judgment of bankers as to what equipment is necessary to the safe conduct of their business, an interesting result will be obtained. For this purpose it may be assumed that a banker will keep no more "cash" on hand than safety to his business requires; if he does he is violating good business judgment. The same may be said of "exchange accounts" and of investments made in low income-producing assets from which "cash" may be realized

by quick returns to support credit-accounts. Assuming further that the principle is a sound one, that such assets as are permanently employed, or such as are continuously needed in the business, should be procured by direct investment of capital (*i.e.*, that a business concern, especially a bank, should not obtain its equipment on a "floating debt"), then the inadequacy of capital increases as we proceed from periphery of the National banking system towards this centre. To exhibit this in tabular form, the result of failure of the Law to require such control as will prevent the overtaxing of capital-resources, and such as will insure that our commercial banks do business on their own capital, would appear something as follows: (*See next page.*)

Capital weakness admitted by bankers

In this question is raised as to several classes of items. Without specific inquiry as to the amount a bank carries for "exchange account" this must be approximated. The approximation here given, however, is a deduction from "loans to reserve agents" (another account which is carried as an invested-reserve for the purpose of supporting the cash-reserve) and therefore one which should be capitalized. As to the securities held, in so far as they are not held as reserve equipment, they are not a banking resource, and like "real-estate" are in the nature of an encumbrance on banking capital. Such assets must be either for support to bank-credit or for direct

Statement of Equipment Actually Used by the Several Classes Compared with Capital Provided

(Stated in Millions of Dollars)

Classes of Capital Items	Iowa	Country Banks	United States	Reserve Cities (second class)	Central Reserve Cities (first class)	New York
Unavailable Capital Outlays:						
"Banking-house," "real-estate," and "margins"	$3.4	$101	$186	$42	$43	$38
Redemption Equipment Used:						
Cash-reserves	5.5	183	606	147	275	208
Exchange account	.5	18	61	15	27	21
Securities	2.4	237	446	116	94	79
Loans to reserve agents	10.1	221	365	145	–	–
Total equipment carried	$21.9	$760	$1,664	$465	$439	$346
Actual capitalization provided	$20.5	$698	$1,310	$321	$291	$215
Equipment carried on floating debt	1.4	62	354	144	148	131
Percentage of floating debt	7%	9%	27%	44%	51%	60%

investment. In either case the bank should not buy bonds on credit. Taking the charges against capital as they stand and the redemption equipment actually used, we find that for the United States, in the judgment of bankers themselves as reflected in practice, the banks should have provided $354,000,000 more of capital to support their business. That is, to properly support $4,363,000,000 of credit used in the course of bank operations to purchase $4,363,000,000 of income-producing assets, the equipment which was actually used should have been provided by the

Amount of increase in capital needed

proprietors of the business. Such a provision would require an increase of twenty-seven per cent in total bank capitalization. But further inquiry would show that all but about five per cent of this gross amount of capital to make up the shortage would be required from the reserve city banks, and that nearly one-half of the entire increase is needed in the City of New York. Such would be the inevitable conclusion if we accept the business judgment of bankers themselves as to the needs for banking equipment.

The Inadequacy of the Bank Act

Again the position before taken is affirmed, — that this is not proposed as a true method of analysis to get at the relation of intensity of credit strain to equipment used. Attention is directed only to the fact that such an element should be taken into account in reports, the purpose of which is to furnish the data for official control as a means of protecting the country against "unsound" banking and an "inelastic" currency. Further, it is suggested that no provision is made in the present form of report for ascertaining these data; and only one provision of law is made to protect the public against any overtaxing of capital equipment. This one provision referred to is the clause which imposes a minimum limit in money-reserve to be kept. This limitation imposed does, in fact, operate to prevent some of the least

The only protection against inflation

provident bankers from bringing their house down on the heads of customers, and precipitating a panic in the business community. Nevertheless, the provision is entirely inadequate to prevent an overtaxing of equipment. To illustrate one of the methods used for complying with the law, and at the same time for carrying a load that keeps the institution on the verge of credit collapse: — From the published reports it appears that a number of banks have individual deposits outstanding amounting to from ten to twelve times their capitalization. Some of these banks continuously carry a cash fund larger than their capital-stock, surplus and undivided profits. They also carry large holdings of stocks, bonds, and other securities. Where did they obtain this money? Undoubtedly they borrowed it. Where did they get their other redemption equipment? Undoubtedly by means of a floating debt. In several instances, only about one-third of the redemption equipment constantly used by these banks is provided by means of capitalization; the balance is obtained on demand loans. Imagine another enterprise being financed in this manner. With methods of capitalization admittedly unsafe if applied to another business, is it to be presumed that our system of commercial credit will be "sound" and capable of rendering the highest service to the business community so long as these methods are permitted?

This is not to be considered as imputing fault to a

banker for doing business in this way. If a banker finds that he may obtain capital from others with which to do business, and that, when a sudden de-

The individual banker primarily not at fault

mand comes for payment, he can force his commercial customers to find the means necessary to replace the temporary foundations withdrawn, if by such methods the banker may be able to keep his own house from falling on the heads of managers and stockholders, he may be exonerated on the principle that he has availed himself of a business advantage which has brought a large return in profits. The method may be excused in the case of the individual bank. But what is the result of this character of banking to the commercial community? And what of a general law and administration which permits such an individual practice? As a National system this is another form of "wild-cat" banking, and it is in this very practice that we find much of the trouble that heretofore has been ascribed to inelasticity of the currency. The prime fault is in a law which permits bank capitalization inadequate to maintain the volume of bank-credit offered by banks to the community as a circulating medium with which to do business and of which customers have availed themselves. This form of bank-credit being suddenly withdrawn to protect the bank from its own weakness, the community and the individual customers of the bank are left in a crippled condition, to struggle against financial loss.

Additional elements of control needed

One of the purposes of control should be to secure a better coordination between the volume of credit-accounts sold and capital equipment provided as a means of support; to this end the National Bank Act needs revision. But having been revised so as to give the Comptroller power to exercise supervision, to prevent the overstraining, as well as the "impairment" of capital, the present power to compel reports is sufficient to make the supervision effective. One of the principal purposes of the Bank Act is to guard integrity of our financial system and to protect the public against loss on account of inadequate bank capitalization. To effect the full purpose of the Act, to vouchsafe a system of control which will secure "sound banking" as well as "sound currency," there should be added to the present powers which are intended to protect against an impairment of capital, inquisitory powers directed against an overloading of equipment. As a means of executing this authority, classified schedules should be devised which will furnish the information necessary to intelligent official discretion, and classified financial statements of results should be published, that the public may the more intelligently deal with the banks.

Chapter IX

CHARACTER OF ASSETS TO BE HELD BY BANKS AS "INVESTED-RESERVES"

A restatement of conclusions

To restate conclusions: If we define capital-resources as those assets which represent capital outlay (assets purchased by means of capital-funds or which are to be charged against capital-account), then it is in financial statements of capital-resources that the capital outlays of a business are to be accounted for. In a banking business, there are two general classes of capital-assets, viz., (1) those in the nature of physical equipment, and investments not available to support banking transactions, and (2) the banking or redemption equipment — resources which have been provided or which are being held to support current banking operations. Investments in assets of the first class referred to (not being a necessary part of the business) may be treated simply as an encumbrance on capital; outlays for assets of the second class (or what we may term "redemption equipment") are essential to the business of banking. Again, under present business conditions the "redemption equipment" of a bank is necessarily made

up of two general classes of resources, viz., (1) the "cash," which is made up of the "money-reserve" on hand retained as a means of protecting the bank against default on current or ordinary local money-demands on credit-accounts, and exchange-balances kept with correspondents to meet foreign demands for money on credit-accounts, and (2) those assets which are held as an "invested-reserve" as a means of obtaining "cash" to meet extraordinary demands on credit-accounts outstanding. The purpose of a legal requirement for adequate capital equipment is to insure the "soundness" of credit-accounts of banks sold to customers for use as funds, without forcing a sudden contraction of the circulating medium and a consequent credit collapse. The reason for carrying a part of the equipment as "invested-reserves" is to decrease the capital cost to the bank. From such a view of the capital-resources of commercial banks, and such a statement of the uses of the two kinds of redemption equipment (viz., "cash" and "invested-reserves" or capital investments readily convertible into cash), inquiry may be made as to the character of assets which a bank may hold as an "invested-reserve." What character of "invested capital reserves" will contribute best to the purposes (public and private) for which they are held?

Generally speaking, there are three kinds of investments in which a bank may employ capital-resources not needed in the form of "cash," but which

are necessary to the equipment of the bank for the support of outstanding accounts. These may be described as follows: (1) Loans to other commercial institutions; (2) stocks, bonds, and other securities; and (3) the commercial paper purchased from those who are not depositors. That is to say, the "loans to other commercial institutions," the "stocks, bonds, and other securities," and the "commercial paper" which are to be considered as "reserve capital-investments" are assets which have not been purchased by means of credit-accounts of the bank. And in making financial statements of "capital-resources" and "capital-liabilities" the bank should clearly indicate what paper or assets are to be considered as chargeable to capital-account. These three classes of investments will be separately considered.

Classes of reserve capital investments

Demand Loans to Other Banks as Reserve-Capital Investments

It is the common practice among banks to loan a portion of their capital-resources to other banks. The reason for this is not a public one, but to decrease the capital cost to the bank. Such loans are set up in published summaries under two heads; viz., (1) amounts "due from reserve agents," and (2) amounts "due from other banks." Regarding the practice from the point of view of public interest, these loan accounts have been considered as assets

immediately available for procuring cash to meet money-demands. So general and so plausible is this assumption, that it was made a part of the National Bank Act, under which both classes of items are accounted as cash. The general acceptance of this conclusion rests on fallacy. The conclusion has been supported by reasoning from analogy. In mercantile business a bank-account is properly considered "cash"; the primary purpose of a merchant's bank-account is to provide the means necessary for meeting current commercial demands.

Loans called "deposits with reserve agents"

While, however, this is true of the merchant, it does not necessarily follow as to the banker. It may not be assumed that a credit-account of one bank against another bank should be considered as cash-capital equipment. For the purposes of the bank, this assumption goes afield at four points: (1) Since the business of the bank is one of purchasing "commercial assets" by exchanging its credit-accounts for the use of its customers as "cash," the bank is in a different funding relation than the merchant accommodated; while the merchant may settle his credit obligations by bank credit, the bank must make provision for the settlement of credit balances in money. (2) The checking out or transfer of the accounts of one bank to customers of other banks outside of the immediate locality must be settled through the estab-

Accounts with other banks as equipment

lishment of an exchange base in other cities; whether this exchange base is in the form of money or of rights to "draw," a considerable portion of the fund cannot be made available for the payment of local demands and for the settlement of local exchanges. The exchange account is capital tied up for the support of exchange transactions and cannot be converted into money without crippling the bank's operations. (3) To permit one bank to sell its "money-reserves" to another bank for a credit or "reserve-account," and then to permit the selling bank to treat the "account" as cash to any greater extent than it may be necessary for the second bank to retain the money in its vaults to meet the exchange demands of the first bank, is to permit both banks to extend their credit-accounts on the same capital support and thus to weaken the equipment of both, since a demand of one bank on another bank for settlement is a demand for money. (4) By accounting "amounts due from other banks" as "cash," without distinction as to the exchange purpose of their creation, and through the regular practice of loaning money-surplus to reserve agents, the reserve city banks have been encouraged to give support to underwriting syndicates and to margin speculation at the same time that the "depositing" bank is extending its credit-accounts with customers. A very large portion of accounts (deposits) held by customers against reserve city banks are credit-contracts created

in exchange for call-loans, which, under ordinary circumstances, may be quickly realized on by the reserve bank; these, however, are not immediately convertible in time of panic without undermining the whole credit structure; at such times a general process of forcing liquidation constricts the circulating medium to an extent that proves ruinous to business. Whenever an unusual demand for payment of loans is made by country banks on reserve agents, such demands force the reserve banks to restrict their own accommodations, and thus contract the circulating medium.

The fallacy engaged by the Bank Act

The underlying fallacy of the reasoning which is back of that part of the Bank Act, and back of the theories which give sanction to the practice itself, may be seen when we analyze the character of the investment. In so far as bank A does not need the reserve fund or account kept with the reserve city bank B, as an exchange base (*i.e.*, for a current purpose) it is investing its capital in the same kind of a credit obligation as is the call-loan customer of bank B. Bank A is degrading its investment judgment to the same level as an ordinary speculator, and receiving therefore a rate of interest little if any higher than might be received on U. S. Government bonds. Bank A's investment (account with B) is one designed to be held as "available" for the purpose of obtaining cash to meet an extraordinary demand.

But extraordinary demand is usually associated with market conditions which make "call-loans" the most delicate of all commercial assets. Yet for this purpose bank A holds an open account of bank B, which in turn has treated the money borrowed from bank A as a "cash-reserve" to support accounts of speculators and to meet demands made on its own accounts. This is the common practice in New York City. By reference to Chart VIII, opposite page 152, it may be seen that the "deposits" of country banks furnish nearly all the money held by New York City banks as a means of supporting about $1,000,000,000 of demand accounts of customers.

It is not a new experience in the financial world for reserve city banks to temporarily suspend money payment to protect themselves against the banker's demand for money on payment of drafts and exchange-balances. The vicious tendency of such a practice of borrowing a money-reserve from other banks and of lending the credit of borrowing banks to speculative enterprise has been a subject of comment by every Comptroller from the foundation of the National banking system down to and including Mr.

Unavailability of reserve accounts in time of strain

Knox; and the undesirability of investing capital of commercial banks in loans to "reserve-agents" was again pointed out by Mr. Dawes in 1898. While under ordinary circumstances they may be convertible, "loans to other banks" cannot be considered the

best kind of reserve-capital investment. There may be many reasons why the banks of reserve cities would be in favor of such a practice, but from the point of view of *elasticity* and *general welfare* the practice should be publicly and legally condemned.

"Securities" as Reserve-Capital Investments

As to State banks, private banks and trust companies, it is shown that a large proportion of the securities owned are in forms not easily marketable when occasion requires. The National banks have no published statistics of the proportion of the several classes of stocks, securities, etc., held, but the reports do show that about one-half of their capital and surplus is invested in stocks, bonds, and other securities; it is also shown that these assets yielded little support to the credit-accounts in time of emergency or extraordinary money-demand. Such a showing and such experiences, however, do not warrant the conclusion that stocks, bonds, and other securities which may at once be converted into cash to meet money-demands on accounts outstanding may not be effectively used as "reserve-capital investments."

About one-half of bank capital so invested

It may be stated as a demonstrable conclusion that such investments are not always convertible into money *by sale* without loss to the bank. But while a favorable market may not always be found in which even stocks and bonds which are considered

as "gilt edge" may be realized on without loss to invested principal, in time of monetary disturbance, securities of this class may usually be realized on *by sale* as soon as the emergency is passed; in time of financial depression it very often happens that investments of the first rank rise to a higher point than during a period of credit inflation for the reason that "gilt-edge" securities are then relatively scarce and are the only ones to which investment capital is attracted.

Convertibility by sale

Elasticity, however, depends on immediate convertibility. Although, in an emergency, "gilt-edge" securities may not be converted *by sale* without investment loss, money may always be obtained on them by a process of *hypothecation*. The large financial companies, such as savings banks, trust companies, insurance companies, etc., which have few demand obligations to meet and which at the same time have large funds available for investment, may come to the rescue of the commercial banks through *loans*, in case the banks do not care to realize on their securities *by sale* at an unfavorable market rate. In obtaining cash by loans or sales of their own collaterally secured credit obligations the banks are able to realize on reserve-capital investments of this kind, by hypothecating their securities with investment institutions. In such event the only part of the invested capital not available for present needs is the

Convertibility by hypothecation

amount represented in the "margins." It is by this process that the Government assists national banks to obtain money on such investments without loss.

Special facility is given for such a disposition under our present Law. Two methods are provided whereby the United States Treasury may permit the immediate conversion of "gilt-edge" securities. In the first place, "United States bonds" may be hypothecated for "issues"; in the second place (under the more recent ruling of the Secretary), when the Government has a Treasury surplus, "gilt-edge" securities may be hypothecated for gold, *i.e.*, "Government deposits," which immediately give to the banks receiving them an exchange-balance against the Treasury. In order to avail themselves of these aids, however, the Government requires that the banks have unencumbered "gilt-edge" securities to hypothecate, and this is what the banks in many instances have failed to do.

Special facilities for hypothecation

Again, "gilt-edge" securities which are unencumbered may at any time be hypothecated in the general loan market. For the purpose of procuring temporary loans, the loan capital of the entire commercial world may be availed of. There are no institutional or National limits to a good investment security. It is to assist in the process of international investment as a means of relieving National financial distress

Support of the loan market

that the "rate" is so often raised by the Bank of England. The loan market is not local or National.

In the past, the inability of banks, which have invested capital in securities, to obtain money *by sale* has been due to one of two practices: Either the bank has departed from the banking business and has become a dealer in securities for the purpose of making its profits on buying and selling instead of looking primarily to interest payments on commercial accommodation, or its officers have been guilty of administrative indiscretion in the purchase of securities which are intended to give support to their own credit-accounts. Their inability to obtain funds *by hypothecation* has been due either to the weakness of the security itself (as frequently happens when the bank engages in underwriting and other speculative ventures), or to the fact that they have already hypothecated their "gilt-edge" holdings. An instance of failure from the first cause — *i.e.*, on account of the character of the weakness of its investments — is found in a recent collapse of a large institution which had sought without success to obtain a million dollar loan on the security of eight million dollars of securities held. Instances of inability of banks to obtain money for pressing need on account of "gilt-edge" securities having already been hypothecated are many; and, under the present Law and practice, the Government holds out a permanent inducement for

Practices which have prevented conversion

banks to weaken their equipment through the hypothecation of their best investment assets. The inducement referred to is the offer on the part of the Government to exchange "notes" and "deposits" for secured accounts of the bank, without interest. The result is, that the banks, as a means of increasing their profits during times of ordinary money-demand, or so-called periods of prosperity, encumber their best invested assets *by hypothecation*, and in time of money stringency and extraordinary demand they are unable to support their credit-accounts (deposits) without forcing "loans."

Commercial Paper as Reserve-Capital Investments

Commercial paper held as "reserve-capital" investments must be clearly distinguished from commercial paper purchased by means of credit-accounts, *i.e.*, by exchange for deposits. Commercial paper which is obtained for direct investment of a bank's capital is usually obtained through its own loan brokers, or through a commercial paper house or note-broker. Their own loan brokers are represented in the "loan crowd" who are seeking to invest the money surplus for the bank. The note-broker would obtain a market for the paper of his customers. The business of the note-broker is to find banking houses or other loaners of capital who are looking for this kind of investment.

How capital is invested in commercial paper

Ordinarily a bank will not buy paper of one who is not a customer if it has enough paper offered by its customers to fully employ its capital. The reason for this is that a customer's note may be purchased in exchange for a credit-account of the bank (a deposit). The bank with its own capital used as a "redemption reserve," therefore, may purchase several times the amount of commercial paper from its customers that it can by direct investment of capital in the notes of those who are not customers; as a result a proportionately larger return in profit will be received from the exchange with customers. The bank will loan through its broker, or will offer to purchase paper through a note-broker, only as a means of investing a "capital" surplus, and this may be used as an "invested-reserve" without contracting or forcing loans to customers.

A "reserve" capital investment

Demands for payment made on these notes do not reflect on the bank itself through forcing the customer (*i.e.*, the holder of its own accounts) to convert. Neither do payments at maturity so seriously disturb the commercial world as do sudden demands on "call" or short-time paper. The paper purchased through note-brokers usually runs for sixty or ninety days, the definite period for which funds are needed by the one selling his paper), and payment will be made by voluntary liquidation. Such demands, however, may

How the practice impairs elasticity

quite as seriously interfere with the principle of elasticity of the bank-account as a circulating medium, since a narrowing market for these loans, or the refusal to renew when renewals are asked, may require liquidation of the accounts where they are kept, and this liquidation may result in violent contraction.

Under such circumstances, commercial paper must be regarded as a very high class of investment for surplus "capital" so far as the interests of the individual bank are concerned. Such investments are also in the line of true banking for profits from interest accrued in commercial accommodations. But nevertheless investments of capital-funds in commercial paper to be held as a "surplus-reserve" may be considered of doubtful character for the community at large. Commercial paper is used by the business man to obtain current funds. Capital-investment in commercial paper may at any time put the bank in the position of forcing the customers of other banks to liquidate, and thereby may cut off banking accommodation when accommodation is most needed. Besides, such a practice tends to relieve the banks of a locality from responsibility for capitalizing to meet the funding needs of its local constituency.

Doubtful character of practice

Chapter X

PUBLIC DANGERS IN THE PRESENT EQUIPMENT OF NATIONAL BANKS

Although the total liabilities of failing banks approaches $300,000,000, the direct losses to customers has been less than $50,000,000. This, reduced to a percentage of loss on total liabilities of all National banks per year, would amount to about one-twentieth of one per cent, or to about one-fifth of one per cent on capital employed in the business. The average direct loss, however, is not the primary consideration, more than is the average direct loss on the circulation of counterfeit coins, or the average direct loss on depreciated currency.

Losses from bank failure

To the individual the loss is in the sudden disappearance of his entire account so far as its use as current funds is concerned. Without notice or opportunity to protect himself, he is deprived of his "cash." To him the immediate loss is as great as if he were the victim of a robbery; his indirect loss is greater, owing to the difficulty of again providing himself with current funds at a time when the credit of the whole community is strained

by the sudden shock and the concurrent cutting off of funds from all the customers of the failing institution. This suggests, also, an incidental loss to the whole trading community, the extent of which cannot be measured or estimated.

The suggestion here made is not intended as an arraignment of the National banking system so far as the solvency of its banks is concerned. The fact is that the individual bank has managed to protect itself against insolvency and that the direct losses to "depositors" have not been proportionately larger than to those of any other of the great banking systems of the world. It is not to this aspect of the situation that pleas for increased "elasticity" are directed.

Direct financial loss not the issue

Arguments for elasticity have reference to the public question — the indirect losses due to inability of the banks of the system to adjust their credit accommodations to current demands. The plea is not for increased security to the stockholders of the bank as a means of protecting them against insolvency, nor for the guarantee of the accounts of banks. In so far as such proposals are made they are purely incidental. The whole question of elasticity is a public one, having to do with the protection of the circulating medium against sudden contraction as a means of preventing loss to the individual bank and to the individual customer. It is to this end that a correlation is advocated between the capital support pro-

vided for credit-accounts and the amount of credit-accounts to be supported.

Capital Equipment and Credit Strain on the System

That the National banking system may be understood with respect to capitalization, the resources and liabilities of all the National banks of the United States are exhibited in classified balance sheet form opposite page 130. In this an attempt is made to re-arrange the various items reported by the banks to the Comptroller in such a way as to show (1) the character of properties purchased by capital outlay which are unavailable for the support of banking transactions; (2) the classes of resources which are to be considered in the nature of redemption equipment, setting opposite these two classes of items the capital provided by the stock sales, surplus, and undivided profits, plus the amount obtained by floating debt; and, (3) the accounts representing banking operations and the relation of the redemption equipment to current demand liabilities. Owing to the indefiniteness and uncertainty of the data contained in the Comptroller's report for this purpose, these statements must be taken subject to the same qualifications and questions raised on pages 94 and 95. But until a form of report is prescribed for the banks which will require specific declarations in classified form, the data given must remain the best obtainable.

The character of equipment illustrated

Assuming this to represent the National banking situation on September 9, 1903 (and it cannot be far afield, for the reason that the items with respect to which question may be raised would not materially alter conclusions as to the results by classes), and assuming further, as does the National Bank Act itself, that an amount due from a reserve agent is to be considered a part of the "invested-reserve" and therefore a capital charge, it would appear: (1) that $186,904,932.68 of the capital of banks was invested in properties and rights that were not available for current credit-redemptions (viz., in "banking-houses," "real-estate" and "margins"), and that the banks could have done just as much business as going banking concerns if they had not had these resources; these (though available for final liquidation) were unavailable investments and operated as a reduction of banking capital. (2) That of the two kinds of redemption equipment (assuming, as in Chapter VIII, that the foreign exchanges were only one-tenth of the local exchanges, and that $60,583,-675.38 would be adequate provision for these) $669,157,468.20 was in the form of "cash-reserves," and $811,543,333.22 was in the form of "invested-reserves" — the total redemption equipment being equal to $1,480,700,801.42. (3) That the total capital provided by the proprietors, including stock, surplus, and undivided profits, after deducting outlays for the unavailable investments, was only $1,123,189,-

CLASSIFIED BALANCE SHEET OF ALL NATIONAL BANKS OF THE UNITED STATES

SEPTEMBER 9, 1903

CAPITAL ACCOUNTS

(LESS $000.00)

Capital Resources

I Unavailable Capital Assets			
(1) Banking house and fixtures		$106,048	
(2) Real estate		21,587	
(3) "Margins" (collaterals held by Governm't)			
(a) Collaterals on deposit			
(1) U S bonds for circ	$381,568		
(2) U S bonds for deposit	136 940		
(3) Other securities for dep	22,000		
(4) Premiums on bonds (?)	14,704		
(5) 5% fund with Treas	18,605		
Total collaterals held	$573,818		
(b) Less "cash" received on collaterals			
(1) Circulation	$375 037		
(2) U S deposits	140 411		
Total avails	$515,449		
Net capital invested in margins		58 368	
Total unavailable capital assets			$186 004
II Redemption Equipment			
(1) "Cash" reserves			
(a) Cash on hand			
(1) Cash items (?)	$23,436		
(2) Bills of other banks	26 497		
(3) Fractional currency	1,[illegible]		
(4) Specie	407 550		
(5) Legal tender notes	156,749		
(6) U S Certif of deposit			
Total cash on hand	$605,836		
(b) Exchange balances			
(1) Exch'ge balances with banks	$60 583		
(2) Due from U S Treas'y	2,737		
Total exchange balances	$63,320		
Total cash equipment		$669,157	
(2) Invested reserve			
(a) Securities owned			
(1) U S bonds on hand	$4 237		
(2) Stocks securities etc	518 746		
Total securities owned	$522 983		
Less incumbrances			
(1) Bonds borrowed	$30,[illegible]		
(2) Bills payable (?)	31 [illegible]40		
(3) Other liabilities	[illegible]		
Total incumbrances	$[illegible],512		
Net am't inv'st'd in securities		446 471	
(3) Other banking equipment			
(1) Loans to res agents (?)	$304 [illegible]		
Less am't due res ag'ts	20,252		
		[illegible]	
Total redemption equipment			1 480 [illegible]
Total unavailable assets and redemption equipment			$1 667,605

Capital Liabilities

I. Capital stock	$753,722
II. Surplus	370,300
III. Undivided profits	185,080
Total liabilities representing capital investment	$1,310 094
Amount of redemption equipment obtained on floating debt	357 511
Total [illegible] unavailable invest[illegible] floating equipment	$1 [illegible]

ASSETS AND LIABILITIES RESULTING FROM BANKING OPERATIONS

Current Assets (acquired in the Course of Banking Operations)

I Due from Banks and Bankers		
(1) Due from national banks	$262 157	
(2) Due from State banks	103 [illegible]45	
(3) Clearing house exchanges	147 [illegible]	
Total amount due from banks and bankers		$512 929
II Commercial Assets		
(1) Loans and discounts	$3 481 446	
(2) Overdrafts	[illegible] 101	
	$3,508 [illegible]	
Less notes re-discounted	15 316	
Net commercial assets		3,493 321
III Miscellaneous Assets		
(1) Internal revenue stamps		41
Total current assets		$4 [illegible]
Total assets		$[illegible] 598

Current Liabilities (incurred in Banking Operations)

I Due to Banks and Bankers		
(1) Due to national banks	$622 838	
(2) Due to State banks	327 425	
(3) Due to savings banks and trust companies	256 966	
	$1 207 230	
Less amount incurred for equipment (see above)	357 511	
Total amount due to banks and bankers from banking operations		$819,[illegible]
II Commercial Credit Accounts		
(1) Individual deposits	$3,156 [illegible]	
(2) Deposits of U S disbursing officers	[illegible]	
Total commercial credit accounts		[illegible]
III Miscellaneous Liabilities		
(1) Dividends unpaid	$994	
(2) State bank note circulation	4[illegible]	
Total miscellaneous liabilities		[illegible]
Total current liabilities		$4 [illegible]
Total liabilities		$[illegible] 598

175.24, there being a difference between the redemption equipment carried and the capital provided amounting to \$357,511,626.18; this amount was borrowed from other institutions and amounted to a demand-credit capital liability or floating debt incurred in the purchase of redemption equipment. To reach such conclusions, it is to be observed, no assumption has been employed that is not based on the plain provisions of the Bank Act itself — viz., that the "amounts due from reserve agents" is to be considered a part of the "reserve-funds" and therefore a capital charge. The amount of this demand-credit liability (or floating debt) must be subtracted from the available redemption equipment before the net amount of capital support to banking operations may be obtained. This net redemption equipment, therefore, amounted to \$1,123,189,175.24.

Redemption equipment—how obtained

To measure the credit tension, or the strain which is brought on the equipment provided, the current credit-liabilities must be brought into comparison with the net redemption equipment. This relation would be represented by the fraction $\frac{4,363,804,559.12}{1,123,189,174.24}$ or if reduced to percentage the capital support would appear as 25.7 per cent of the banking operations supported. Still another result would be obtained by setting off the institutional assets against institutional liabilities. Assuming that this might be done

without impairing the banking power, the net banking operation would amount to $3,493,363,570.62, and the relation of equipment would be raised to 27.9 per cent. This would be the measure of strain on the assumption that all parts of the redemption equipment were equally available for the support of credit. Of this equipment, however, $811,543,333.22, or 72.2 per cent, is in the form of investments, and 27.8 per cent in money-reserves. Without a special examination of these investments no measure may be taken of their strength. Experience shows that the amount of invested-reserves actually available as equipment to meet the credit strain in time of need falls far below the amount and proportion above indicated. With this statement in view as to the method of arriving at the conclusion here reached some more general observations may be made.

Credit strain on redemption equipment

A Historical View

From 1869 to 1893 the "money-reserves" in National banks were equal to about 50 per cent of the share capital. During the same period the combined amounts of money-reserves plus the unencumbered securities ("United States bonds," "stocks, securities, etc.") were equal to about 50 per cent of the share capital plus the surplus. Investments in the nature of loans to other banks made up a large part of the balance of capital-resources; under ordi-

nary circumstances these last mentioned investments (loans to other banks) are available resources for the support of credit-accounts, but as a form of equipment they have always shown weakness at the very time when strength is required. In many instances, however, the loans to other banks have not accounted for the entire balance; at such times as this discrepancy has appeared, it is evident that the banks have used a portion of their capital for direct purchase of "commercial assets" instead of procuring them by exchange of credit-accounts. From inquiry as to practice of individual banks it is found that many of them have been guilty of investing a portion of their capital in loans to customers, relying specifically on their "commercial assets" to support their "credit-accounts." Such a practice is *prima facie* evidence of an extension of credit which may at any time cause the banks suddenly to reduce the credit-funds in the community to protect themselves from loss. To the public the result is the same as if no capital whatever had been invested in the banking business.

Banking equipment before 1893

Since 1893 the showing has been quite a different one; increasing proportions of capital-funds have been used to purchase securities. Had these investments been readily convertible into cash when money was needed, the banks would have been in a much stronger position to-day than they were in before 1893. The fact is, however, as hereinafter shown,

that owing to the large interest of the banks in "call loans" secured by collaterals, these investments, stocks, securities, etc., owned have not been immediately convertible *by sale;* many of them are not even convertible *by hypothecation* in time of extraordinary money-demand. Among these may be placed securities which have been underwritten, for the reason that if they were marketable they would not be "on hand." The effect of investment of capital-funds in "stocks, securities, etc.," in many instances has been that such investment has come to be an added burden on banking equipment, instead of being an increased support to commercial credit-demands, and a primary cause for increasing credit disturbance by increasing the expansion and contraction of credit-funds. Since 1893 credit disturbances and inability of bank-credit to meet demands have increased, until "inelasticity" has become the most important problem in American finance.

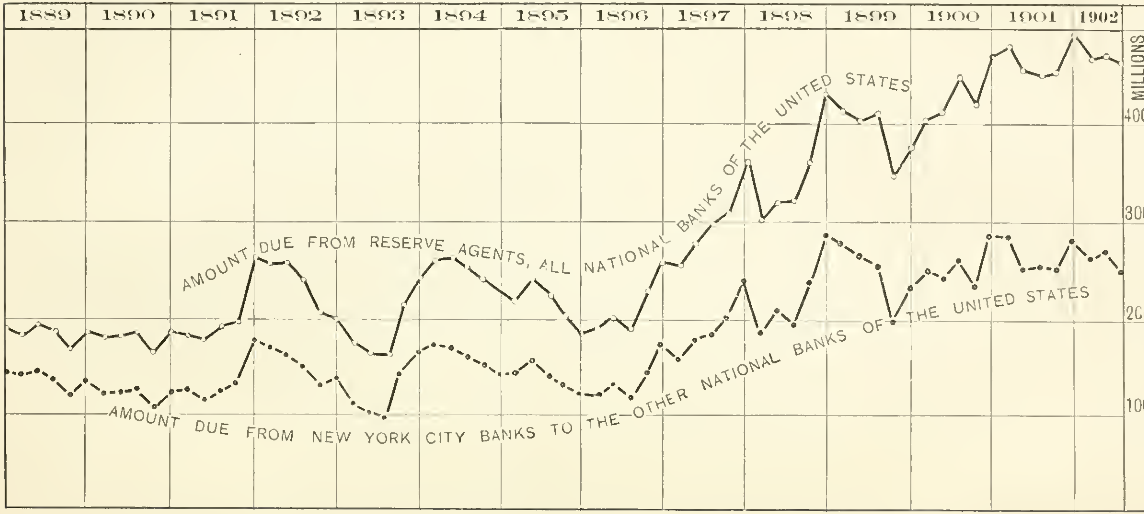
Character of capital investments since 1893

Banking Equipment Purchased on Credit

Within the last ten years there has been a gradual increase in the proportion of "money-reserves" to capital. The "money-reserves" have grown until for some time they have been in amount about equal to the "share-capital" (not including "surplus" and "undivided profits") employed by National banks; and the

Inadequacy of proprietary capital

VII. CHART SHOWING HOW THE MONEY DEMANDS OF THE COUNTRY REACH NEW YORK THROUGH THE RESERVE SYSTEM



amount of "money-reserves" plus "unencumbered securities" has come to be larger than the combined total of "share-capital" and "surplus." This situation, however, has not been associated with an increase in "money-reserves" proportionate to credit-liabilities, but with a decrease in capitalization. If we consider the loans to reserve agents as a part of redemption equipment, then the equipment of National banks for the support of credit-accounts far exceeds the proprietary capital provision made for its purchase — an anomalous position; a situation to be explained only by the assumption that a part of the banking equipment had been purchased on credit. From a point of view of the proportion of banking equipment represented as being available, the banks are in a much stronger position than they were before 1893, but this representation is without consideration of the adaptability of equipment to the purpose for which it is provided and used. As a matter of public concern, *equipment* is for the purpose of *supporting the credit-accounts without contracting loans*, and it is with reference to these that its strength must be measured. Capitalization must be considered simply as the means by which the equipment is to be procured. Judged from this standard, the capital is inadequate to provide equipment used; and equipment used being procured on credit and weakened by this character of charge is inadequate to support banking demands.

As before shown, the operation of the legal reserve clause of the National Bank Act has been to prevent a decrease in the amount of money held below a point necessary to meet ordinary current needs; but at the same time the credit load which the banks have attempted to carry has been multiplied until within the last ten years the proportion of total capital-resources to demand obligations has been materially lessened. Proportionate to the credit load to be supported, therefore, banking equipment has been weakened not only with reference to its quantity but also with reference to its quality. The increase in money-reserves has been due to an increase in relative weakness of total banking equipment through an increase of credit-accounts outstanding. The equipment now used to support outstanding demand-credits is not only relatively weaker, but a large part of it, instead of being provided by means of capitalization, has been purchased or provided by means of the very current-accounts (the demand-credit) which the equipment so purchased was intended to support.

Increase in money-reserves due to increased credit weakness

Methods Employed to Increase Equipment without Increasing Capitalization

Under a banking law which allows banks to pay interest on "deposits" of (loans from) other banks, — a law which permits the depositing (loaning) bank to count the loan a part of its cash — a premium is

placed on an inferior kind of redemption equipment, and a practice has grown up which in many instances has destroyed the equipment character of the loan. On September 9, 1903, there were approximately $395,000,000 of these loans. Several points of weakness of the "loan to reserve agents" have already been referred to. A practice which completely thwarts the purpose of the Act and renders the "reserve-account" wholly unavailable is known as "loading" balances or "mutual balances." Bank A deposits with (loans to) bank B (its reserve agent) $100,000. Bank B loans to bank C $100,000. Bank C loans to bank A $100,000. Under our present system of reporting, by such a series of transactions bank A having $100,000 in cash may count it as $200,000. If, however, bank A were required to send in a report on some such classified form as that hereinbefore suggested, every transaction of this kind would appear on the balance-sheet as well as in the private instructions to the Comptroller.

The "loading" of "accounts with reserve agents"

The method of purchase of commercial assets described by Mr. Vanderlip has also been employed for procuring the *capital equipment* used to support commercial credit-funds. A corporation wishing to float an issue, obtains an underwriting; or by some method it may get a quotation on the Street or on the Exchange. These issues, if underwritten by the bank, to the

The credit purchase of securities

extent that advances are made on this account, are considered as "stocks, securities, etc."

If not underwritten by the bank they may be used by the broker as collaterals for procuring increased loans; if the broker cannot obtain a loan on this sort of collateral at reasonable margins and interest, other securities may be substituted, and the broker may carry the new flotation against his own capital until the new issues are disposed of to the public. For the purpose of buying these increased loans to which the securities stand as collateral, the bank uses its own increased credit-accounts, which in turn are used by customers as cash to buy other securities. As the public gradually absorbs the securities offered, the banks are able to absorb larger volumes of money through voluntary payments made on loans, without increasing capital.

The credit purchase of "money-reserves"

This process of "loading" and of credit acquisition of equipment reserves may continue so long as credit inflation continues and the money supply of the country is increased by a favorable balance of foreign exchange on sales of goods; or the same result may be accomplished by decreased demand for legal-tender money to be used as "current cash" in the community.

At last the tables turn. There is an increase in the demand for money in outstanding accounts. The balance of foreign exchange, on account of goods,

grows less; with the increase of business activity the demand for money, for "till cash" and "change" increases; and again, the demand for money may be still further increased by the decreased use of bank-credit-accounts, due to doubt as to the ability of the banks to meet their customers' accounts outstanding. At the same time there is a corresponding decrease in the demand for securities. The public no longer continues to absorb stock and bond flotations offered by speculators and promoters, and the brokers are forced to carry increasing quantities of undigestible securities against their own capital. With falling prices of securities, the banks inaugurate a process of liquidation of the loans, which in turn, not only wipes out margins, but also, on occasion, when the shrinkage in prices and in available assets of speculative customers has been too rapid, forces the bank to take securities in satisfaction of loans. These securities so taken are also added to their holdings of "stocks, securities, etc."

The inherent weakness in such practices

The upshot of such practice is this: (1) That while money-reserves may be temporarily maintained to meet the provisions of law without curtailing commercial accommodation, market conditions which call a halt to speculation place the banks in a position which forces liquidation of loans to maintain these "money-reserves"; (2) the current-accounts expand beyond a safe proportion to total resources purchased

The public concerned

by means of invested capital; (3) the capital-investments themselves become impaired in quality and are not readily convertible; (4) a part of the capital of the banks which should be used in the business is diverted to underwriting and speculative ventures; and (5) in time of credit contraction (the burden of procuring money as a means of meeting demands in the credit-accounts used by the banks to purchase income-bearing assets being forced on the commercial and industrial community) all profitable business suffers for lack of current funds.

From the practice of National banks during the last ten years, some other interesting conclusions may be drawn. In the first place, it is evident that elasticity requires some sort of protection against the expansion of bank-credit beyond the margin of safety to available capital equipment provided by the bank for its support. In the second place, the conclusion before drawn seems beyond question, viz., that if banks are to give support to underwriting and to margin speculation, such capital equipment as is used to this end should be clearly distinguished from the equipment used in the commercial banking business. In the third place, the conclusion would seem beyond controversy, that when a bank in its various capacities overloads its capital support, or permits itself to extend its credit beyond a point of safety, the only way the credit relations of a community may be

Inherent dangers

maintained and brought within lines of safety without contracting commercial accommodation, and forcing a reduction in current credit-funds, is by enlisting the support of new and increased capital — a banking capital large enough not only to support its regular commercial business with safety, but also to provide the funds necessary to carry on the various underwriting and speculative enterprises through which the banks are forced into a position of contributing capital for the permanent equipment of new promotions.

The Increasing Weakness of Banks in Periods of Credit Expansion or So-Called Periods of Prosperity

To illustrate the need for a correlation of both "money-reserve" and "reserve-capital investments" (or total redemption equipment) to credit-accounts outstanding, the exhibit on Chart XIII is referred to. Taking the record of the last forty years it would be shown that periods of credit strain have been periods of relatively low capitalization and overtaxed equipment. These also have been periods in which demands for greater elasticity have been heard. It is also quite as apparent that there has been an ever increasing ratio of credit obligations to capital equipment. Assuming the most favorable hypothesis possible — that the whole capital of the banks

Failure in the past to coordinate credit support with credit strain

has been properly invested in resources which may be used to support accounts outstanding — no other evidence is needed of over-issue of credit-accounts or over-sale of "deposit" obligations on the part of the banks. Periods of speculation have carried credit-accounts out of all safe proportion to capital invested as a means of providing equipment for the business. As a result, when money-demands on exchange-balances have increased, the banks have been forced to curtail loans to customers to procure the money necessary to make payments to other banks. Periods of depression and of financial reorganization have followed so-called periods of prosperity and credit expansion; so-called periods of depression have been seasons of readjustment of current credit to capitalization. If we reduce this experience during the last period of prosperity to a base of percentages, a tabulation of results would be as follows:

Year	Per cent of Capitalization to Customers-Accounts Sold	Year	Per cent of Capitalization to Customers-Accounts Sold
1896	56	1900	35
1897	49	1901	31
1898	42	1902	32
1899	33	1903	36

Again engaging the most favorable assumption (that, during this period, all of the capitalization of the National banks was invested in the best of banking equipment, and that during all this period there was no weakness in the character of capital-resources held), the showing is an interesting one. From the

foregoing it will appear that in 1896 the capitalization (share capital and surplus) was fifty-six per cent of the amount of credit-accounts (deposits) sold to customers. From 1896 to 1901, or the period of credit expansion, the banks had so far increased the proportion of the demand-credit obligations sold to customers that they had reduced their capital equipment to thirty-one per cent. Since that time they have been forcing an adjustment by process of gradual liquidation, and in 1903 they had increased the ratio of capitalization to thirty-six per cent, as a means of protecting themselves against the folly of oversale of credit-accounts to customers.

Increasing weakness in periods of "prosperity"

The disturbance which was caused to business was well-nigh equal to that caused by the issue of greenbacks during the Civil War; during the two years of liquidation the loss sustained to securities (by parties on which these documentary properties had been unloaded in times of so-called prosperity) was quite as great as the cost of carrying on the greatest military campaign in history. And it is not certain that the lesson has yet been learned; for we find that immediately following a long period of forced liquidation at the opening of the year 1904, when money and credit-demands had suddenly grown less, the New York banks alone, in three weeks, again increased their sales of credit-accounts (deposits) over $42,000,000.

The credit disturbance equal to that of the greenback inflation

This operated on business in the same manner as if there had been a sudden increase in the money circulation of like amount. The press again congratulated the public on a business revival. Little thought was given to a possible day of reckoning.

The experience of the last forty years of National banking (and the same experience might be shown in State and private banks) suggests that some limit should be placed on bank-credit issues (deposits) other than that found in the "legal money- reserve"; that "reserve-capital investments" should be considered as well as money-reserves; that, while the Comptroller may properly interest himself in the money equipment of a bank as a safeguard to credit, he should also have the power to call a halt on increasing credit-issue beyond a safe proportion to total unimpaired redemption equipment — *i.e.*, the total *cash* and *assets readily convertible into cash without calling in commercial loans.*

A limit of safety needed

Federal authorities should be given such powers that they might force the stockholders of a bank to increase its capitalization when it attempts to handle a volume of business disproportionate to its capitalized equipment — *i.e.*, to force the banks to discontinue the practice of issuing credit beyond the point of safety. Such legislative and administrative control over our credit institutions is just as imperative as

Should be regulated by federal authority

that directed toward the limitation of credit-money strain on the gold-reserve of the Treasury, the limitation of strain on the structure of bridges or the equipment of mines, or the enactment of legislation for safety of buildings devoted to manufacturing, etc. It should be recognized that the credit equipment, when overstrained, is hazardous, not alone to those immediately involved, but also to the business interests of the entire nation.

Chapter XI

WHY THE "UNENCUMBERED SECURITIES" OF NATIONAL BANKS ARE NOT READILY CONVERTIBLE INTO CASH

It has been assumed that, under our present banking system, "unencumbered securities" are the most available of the capital assets or redemption equipment to meet money-demands in time of strain without curtailing commercial accommodations. At the risk of tedium, the reasons for this conclusion will be retold: (1) That commercial paper, whether purchased by means of capital or on credit-account may not be converted into cash, except in so far as it may be voluntarily paid, without impairing the elasticity of credit accommodations, for the purpose of obtaining money to meet demands on credit-accounts without contraction; therefore, loans must be considered as "contingent." (2) The effect of forcing payment of loans to (amounts due from) reserve agents, at times, is to curtail banking accommodations of the reserve banks and therefore to impair the elasticity of "customers-accounts" in the reserve cities — *i.e.*, to cause contraction instead of allowing expansion of

Points of superiority of "unencumbered securities"

this form of current funds. (3) The securities deposited "for circulation" and "for deposits" of Government cannot be utilized. When the cash-reserves are threatened, the only class of assets of considerable amount remaining that is readily available, and which will make possible the expansion of credit-accounts when expansion is demanded, is "unencumbered securities."

The Use of Banking Capital for Outlays in Unavailable Assets

With the exercise of good banking judgment, "unencumbered securities" might be utilized to obtain new supplies of cash to support the "money-reserve." Assuming that the assets of this class held by banks are "available," our commercial-credit institutions are in a stronger position to-day and may give greater elasticity to their credit-accounts than ever before. This delectable conclusion might be admitted, were it not for two trite facts: (1) that during the two years following September, 1902, the banks were hard pressed for money and the business community suffered enormous liquidation on account of "inelasticity" of bank-credit; (2) that the banks during this time did not to any great extent, indeed, throughout a long banking experience, they have not taken any considerable portion of securities to market and sold them for cash to relieve sudden pressure. The un-

Investment in unavailable securities

encumbered securities held have been constantly increasing; the amount held by the National banks has during the last thirty years increased from a small holding to about $500,000,000. The increase has been gradual, almost without a break in the line (see opposite page 244), yet the banks have not to similar extent utilized securities to meet money-demands or to support money-reserves; they have not by sale converted them into cash. On the contrary, they have, on numerous occasions, in time of financial peril, increased their holdings of securities, and thereby increased the weight of liquidation which has been thrown on assets acquired by means of their own demand liabilities.

The principle of elasticity sacrificed

Now the question may fairly be raised — Why is it that so large a part of the capital-assets of banks has not been used to obtain money to protect demands for money made on their credit-accounts; why has the principle of elasticity of accounts been sacrificed, when unencumbered assets were at hand to support the credit of institutions whose business it is to purchase commercial paper "on account" and to provide current funds to the community when needed? By referring to the chart (page 244), it will be seen that "commercial assets" and not "securities" have responded to money-demands. The fact stands out boldly that the customer has been sacrificed and that business accommodations have

been neglected; good commercial paper has been turned away and good loans have been called or reduced to protect capital-investments in the form of securities owned. It is in this fact and in this situation that we must look for much of the practice that has stood in the way of "elasticity."

Why the banker does not sell securities

If we ask a banker why he does not sell his stocks and other unencumbered securities for cash with which to protect his customers-accounts without curtailing loans, he will say that under the existing system and practice he cannot do so without loss to the capital-resources of his institution. The practical business problem is, therefore: Shall the bank suffer a capital loss in its efforts to obtain money with which to make good its accounts, or shall the public suffer from inelasticity of bank-credit? In such an emergency, there is only one way that a faithful bank officer can answer such a question: The burden of loss must be shifted, if possible, and forced liquidation is the result. A better solution would have been not to have allowed the bank to get into such a situation. But for this the banker is not entirely at fault; this has not come from any disposition on his part to curtail accommodations nor to deprive his customer of needed funds. The trouble has been in the kind of competition that he has been forced to meet and in the system which he is employed to operate.

An explanation which has been offered to account for the relatively unvarying amount of securities reported by banks is, that these securities are used as collateral security for "bills payable" and "other liabilities" such as temporary loans from other financial institutions. While there is considerable of fluctuation in "bills payable" and "other liabilities," and these fluctuations respond in a measure to periods of extraordinary money-demand, they do not account for more than a small part of the evident "inconvertibility."

The claim that they are used for collateral

A better reason why "unencumbered securities" have not been "convertible into cash in time of panic," as a means of support to "money-reserves," seems to be in an interpretation of the statistical exhibits of the annual reports of the Comptroller. The increase in "Stocks and Other Securities" owned by National banks during the five years 1898–1902, inclusive, is given as follows: 1898, $255,000,000; 1899, $320,400,000; 1900, $367,300,000; 1901, $448,600,000; 1902, $493,100,000.

The Character of Securities Held by Banks

The securities owned have been an increasing "unencumbered asset." The power of one to convert property into money depends on a market; the gain or loss depends on the price obtained as compared with cost; the price obtainable depends on the purchasing demand at the time the offer is made. This

takes us into a more general banking situation. The National bank is only one of four classes of institutions pressed for money at the same time and having the same kind of securities for sale. It must enter a market in which State banks, private banks, and the trust companies, — besides, on occasion, in a smaller way, the savings banks, — are also buying and selling. If we take into account the holdings of similar unencumbered securities by these institutions for five years they appear as follows:

Railroad Securities

(Amounts in Millions)

	1898	1899	1900	1901	1902
State banks	$ .6	$ .2	$ .3	$2.4	$3.3
Private banks	.7	.3	.5	1.3	.7
Trust companies	14.6	12.5	10.4	22.0	18.0
Totals	$15.9	$13.0	$11.2	$25.7	$22.0

Banks, Stocks, etc.

(Amounts in Millions)

	1898	1899	1900	1901	1902
State banks	$2.6	$2.2	$ .4	$ .1	$ .2
Private banks	.3	.3	.4	.4	.4
Trust companies	.9	1.2	.2	3.2	2.6
Totals	$3.8	$3.7	$1.0	$3.7	$3.2

Industrial and other Securities — not including United States and Municipal Bonds

(Amounts in Millions)

	1898	1899	1900	1901	1902
State banks	$121.5	$160.7	$179.6	$228.5	$267.1
Private banks	2.1	2.0	2.4	4.1	3.2
Trust companies	137.8	216.4	305.9	358.5	412.8
Totals	$261.4	$379.1	$487.9	$591.1	$683.1

Total Securities Owned by State Banks, Private Banks and Trust Companies

(Amounts in Millions)

	1898	1899	1900	1901	1902
Railroad securities	$15.9	$13.0	$11.2	$25.7	$22.0
Bank securities	3.8	3.7	1.0	3.7	3.2
Industrials, etc.........	261.4	379.1	487.9	591.1	683.1
Totals	$281.1	$395.8	$500.1	$620.5	$708.3

Total Stocks and other Securities Owned by Commercial Banks

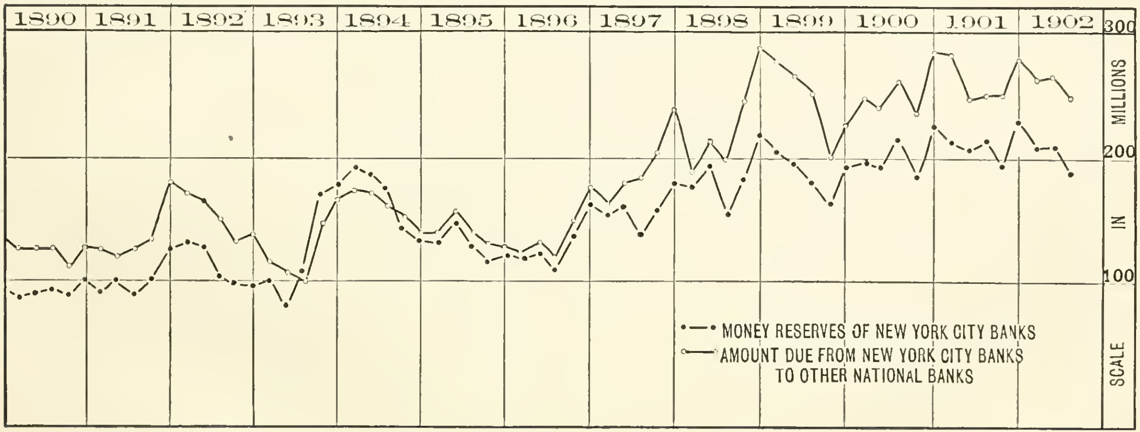
(Amounts in Millions)

	1898	1899	1900	1901	1902
National banks	$255.2	$320.4	$367.3	$448.6	$493.1
Other commercial banks, etc.	281.1	395.8	500.1	620.5	708.3
Totals	$536.3	$716.2	$867.4	$1069.1	$1201.4

The foregoing exhibits show that in State banks, in private banks, and in trust companies, there has been a remarkable increase in securities held, and that nearly the whole amount has been in stocks and bonds other than "Railroads," "Banks," or "Municipals" (for municipals are not represented here). The increase has been largely in those securities known as "Industrials, etc." We also know that many of these institutions have been active in underwriting industrial and other current issues; in so far as these are represented they are still in the form of "undigested securities." We have no sufficient data for the closer classification of "stocks and other securities" owned by National banks, but it may fairly be assumed that they have been somewhat similarly involved in the practice that has been so

Proportion of industrials, etc.

VIII. CHART SHOWING THE AMOUNT OF MONEY BORROWED BY NEW YORK CITY FROM OTHER BANKS, AND THE AMOUNT OF CASH ACTUALLY HELD BY NEW YORK CITY BANKS



prevalent with private banks, State banks, and trust companies. In this practice, which ties up the capital of banks in securities which are not readily acceptable as collateral, and in the efforts of the banks to prevent investment loss in forced sales, may be found sufficient reason for the present "inconvertibility of securities."

The Effect of Call-Loans on the Use of Unencumbered Securities as Redemption Equipment

The uncomfortable financial gastritis caused by "undigested" industrials, however, will not explain the persistence of similar conditions of inconvertibility extending back thirty or forty years. For explanation of this another market situation may be appealed to. From the report of the Comptroller it appears that at the time of greatest liquidations, September, 1902, these various banks were holding collaterally secured loans to the amount of $2,146,600,000,to which, if we add a twenty per cent margin as a basis for estimate of the stocks held in trust, would make an aggregate of $2,575,900,000 of securities, to the sale of which they look for the payment of loans. In this situation may be found a continuing or persistent force — a reason in self-preservation — for the inconvertibility of securities owned. To attempt to sell their own holdings of $1,201,400,000 in time of financial strain would threaten the market for more than twice that amount of collateral

security, on the sale of which loans depend for payment. The loss from sudden conversion of "stocks" owned, therefore, would be a double one. It would depreciate the properties owned by the bank and at the same time would threaten loss on collateral loans. In these circumstances the only solution, without loss to the bank, is such a careful handling as will allow the bank to obtain money desired without any sudden shock to the stock market.

The Need for Separate Capitalization for "Speculation" and "Underwriting"

The present and continuing practice of underwriting and of loaning on collaterals to speculators gives the key to the inability of the banks to use this class of capital assets to support their credit — to the inconvertibility of "unencumbered securities." Instead of looking to stocks and bonds for investment of "surplus capital-resources" and holding these as a means of protecting the money-reserve from depletion, instead of looking to these investments as a part of the equipment provided out of capital to support the current-accounts of customers (the stock in trade of the bank) there has ever been a temptation for

The different financial character of these businesses

banks to turn a part of their capital-resources away from the commercial banking business. In the early part of the past century real-estate was the attraction; investment and speculation in this came to be so

dangerous a practice as to bring forth universal condemnation, which resulted in the enactment of statutes prohibiting real-estate purchases. Later, stocks and bond issues of corporations attracted the funds of the banker. The more recent practice has been defended on the ground that securities are more readily convertible into cash. As a matter of practice, however, under our present system of "reserves" and "call-loans," they are not and never have been quickly convertible assets when an invested capital reserve is really needed to support customers-accounts. They have proved not quite so dangerous to our credit institutions as real-estate investments, but nevertheless dangerous; and the institution so owning "securities," when sorely pressed, have done the only thing possible to do, viz., turned to commercial paper assets, forced loans, and shifted the burden as far as possible on the community, rather than themselves suffer an investment loss on forced sales of securities.

Conclusions as to practice

The principle that the commercial bank should furnish funds for speculation without special capitalization for that purpose is a wrong one; it results in destroying, in part at least, its usefulness as a commercial banking institution.* If marginal speculation is to remain a prominent feature in financial circles,

*To show the disturbing influence of speculation the chart on page 160 has been prepared. From this it will be seen that during the period from 1893 to 1897 the individual accounts (deposits) and the "loans and discounts" of New York banks followed along parallel lines. This was a

institutions intended primarily to serve such a constituency should stand on their own basis of capitalization, and should have a financial equipment in the form of resources especially adapted to success in the rendering of such service. The commercial bank which builds up a "call-loan" constituency encourages a practice and a use of banking capital which in time of strain not only precludes the possibility of converting unencumbered securities owned, but also loads the market with collateral loans and shuts the door of opportunity for obtaining money, by sale or by hypothecation of capital-resources held in reserve.

period during which New York banks were supporting a relatively small volume of speculation. From 1897 to 1902 the speculative activity of the metropolis was the most conspicuous feature. The disturbance of commercial-credit relations is traced in the erratic movement of the lines. At times the loans and discounts nearly equal current obligations. Again, within a few months there will be a disparity amounting to several hundred millions of dollars. This speculative result cannot be considered a wholesome one for a commercial bank.

Chapter XII

DANGEROUS ASSUMPTIONS MADE BY THE GOVERNMENT WITH RESPECT TO CURRENCY AND BANKING

The failure on the part of legislators and administrative officers to appreciate the distinction between the functions of the Treasury as the sole agency of money-issue, and the functions of the commercial bank as the sole agency for the issue and redemption of commercial-credit used as current funds under the American financial system, has led to legal provisions and to practices which are in large measure responsible for the undesirable condition of our circulating medium as well as for the present inadequacy of bank capitalization and redemption equipment. It was not until the last decade that a proper appreciation was had of the provisions to be made for the support of the credit-moneys issued by the Treasury. This having been brought to the attention of the country in 1893, the same motives which moved the people to demand security for State bank issues after the fall of the first and second banks of the United States, the same motive that sanctioned the establishment

Failure to appreciate character of Treasury issues

of an independent Treasury, that made the issues of the National Treasury more acceptable in business than the mixed and uncertain State bank circulation, and that brought popular support to the National banking system, called forth an expression favorable to "sound money" on every occasion that the issue has been raised.

The controversy of the recent money campaigns was not one as to whether the Treasury should so fortify itself that its issues or money promises should be immediately redeemable; this point was conceded by both factions. The question was as to the standard to be adopted as a basis for issue and redemption. The silver party urged that gold was becoming relatively scarce, as evidenced by an almost continuous fall in prices since 1873, and that the adoption of a gold standard of money and credit would perpetuate conditions unfavorable to commerce and industry; the gold party held that the administrative attitude for the last twenty years had been to make all contracts for money payment gold obligations, and that a change of standard such as the silver party urged would cause financial disturbances that would be ruinous. The refusal of the silver party to make a declaration that all past contracts should be considered as gold contracts lent color to accusations of intention to dishonor. But whatever may be said of the standard controversy, it must be admitted that

Contention in the money campaign

the sentiment for "sound money" — a money every dollar of which would be redeemed on demand at par in the standard adopted — was practically unanimous. In the elections which followed the people chose gold for the money standard, and the subsequent increase in gold production has reacted in price ratios in such manner as to make this choice acceptable to both parties and to eliminate the "standard" controversy from politics. The effect of the last few years has been to so fortify the Treasury as to enable it to redeem its money obligations in gold — in other words, to make a gold standard credit-money a sound one.

The recurrence of a period of credit contraction and financial depression has brought the other arm of our financial system under popular as well as official scrutiny. As never before the public is beginning to realize that there is something wrong with institutions of commercial-credit. Animated by the same motive as in the past — a desire for soundness in the financial system — but convinced also of the need for a sort of adjustment that will make the system capable of adapting itself to the fluctuating demands for commercial accommodation, the thought of the people is again turned toward financial reform.

Failure to appreciate the character of bank-credit

The "soundness" required of banks as public agencies of commercial-credit is not only one of ability to pay, but ability to pay without disturbing

the credit relations of the country. With respect to the banks, as well as the Treasury, it is recognized that in the past the Government failed to appreciate its responsibilities. It has also failed to grasp the problem before it; it has assumed an attitude that has proved harmful — has engaged assumptions which must be abandoned before a better adjustment can be made to American business conditions.

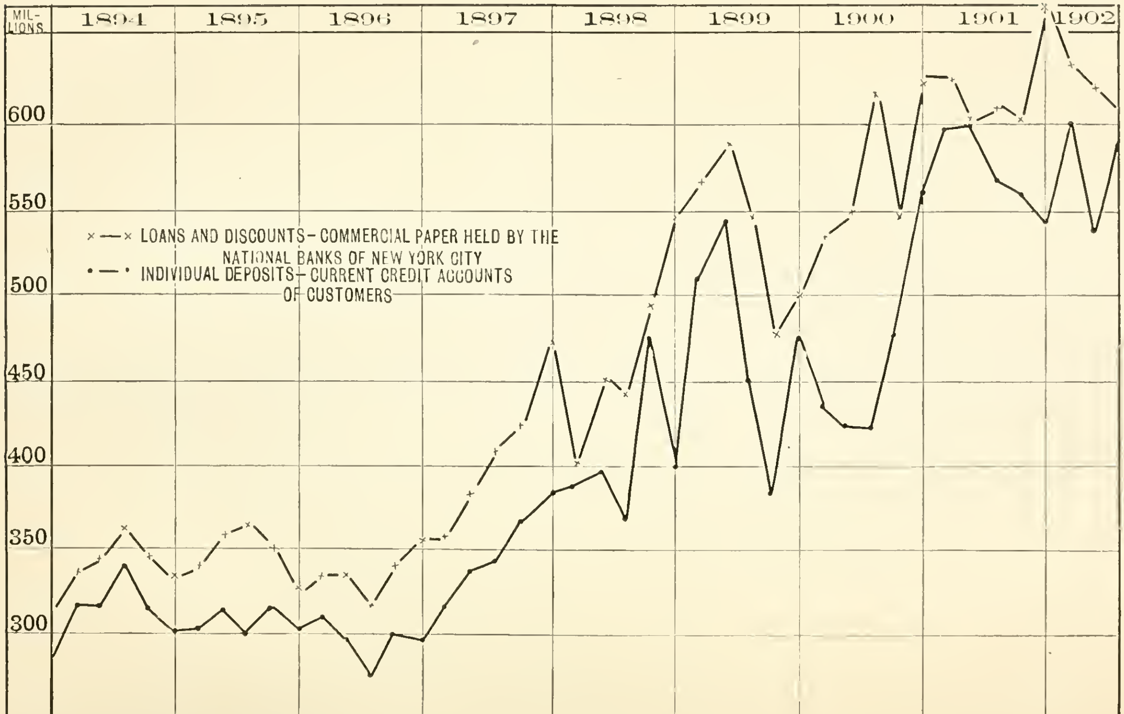
A campaign for elasticity in banks

The Assumption of the Government that the "Cash-" Reserve is the Only Reserve Needed for Credit-Accounts

The dangers inherent in the reserve practice have been discussed in another relation. It may also be considered with respect to the attitude of the Federal Government. The first effect of the assumption that the "cash"-reserve is the only guarantee needed for credit-accounts was the incorporation of this fallacy in the National Bank Act. It has already been pointed out that such a legal requirement may be complied with without the use of a bank's capital by borrowing money from customers or from other banks; it has been further shown that the permission given under the Bank Act for a bank to count its loans to other banks as "cash" allows the banks to inflate their legal reserves by process of maintaining "mutual balances." The lack of legal provision requir-

Gives no key to capital strength

IX. CHART SHOWING THE MANNER IN WHICH BANK CREDIT IS AFFECTED BY SPECULATION



ing a coordination of equipment provided by means of capitalization with total "deposits" or credit-accounts outstanding leaves no protection to the customer and no adequate guarantee of such a character of soundness for commercial-credit-funds as will protect the public.

Government control of this kind forces inelasticity

Aside from the capital weakness induced by practices thus encouraged, another effect of the provisions of the Bank Act, based on this assumption, is to leave the system without possibilities of credit expansion when there is a coincident increased demand on the banks for money — *i.e.*, without power to adapt itself to the expanding and contracting demands for commercial accommodation without violation of the "legal preserve" requirement. Under such a provision of law, the money-reserve itself is not available to meet demands on credit obligations. And there is no provision made for obtaining more money to support new credit-accounts. As a result, when demands increase, accommodations must be restricted in order to preserve the integrity of the legal money-reserve kept by the bank to meet money-demands. The Government, through its Department of Comptrol, therefore, having first set up a fund to guarantee the financial integrity of the institutions issuing credit, places itself in the way of the bank using this fund for the very purpose for which it was created. By this attitude the Government

often forces a bank to fall back on its constituency and force a reduction in accommodations. Thus, under the operation of the assumption made, the legal system of control becomes an element of primary disturbance, and the bank, even when financially sound, may fall into the hands of a receiver, thus adding still further to the credit-constrictions and credit-contractions against which complaint is entered.

Limits intelligent control

Another result of the Law requiring a minimum reserve to be kept, and looking to this only for protection of accounts, is to limit the exercise of functions of comptrol and prevent inquiries which are essential to a knowledge of financial condition. Before reform in legislation can take place there must be a complete abandonment of the "reserve" principle which now stands as a fundamental feature of the Bank Act.

An Assumption that the "Note-Issue" is not a Loan to the Bank without Interest

Weakens capital support

A second assumption that has led astray legislators and bankers is, that the "note-issue" is not a Government loan to the bank without interest. It has before been pointed out that the note is obtained by the bank entering into a contract with the Government for the delivery of an amount of money equal to the amount of issues received, the contract for pay-

ment being secured by United States bonds. It has also been observed that this amounts to an exchange of obligations by which the Government (through the bond market thus created) receives money for its purposes and the banks obtain "issues" with which to do business, a device which ties up the capital of the bank and places on it the duty of first redemption of the note. But the weakening of the capital support to the banking business — that support available for redemption of current credit-obligations — is not the only public danger which lies in the assumption.

Induces currency disturbances through note-issues

Viewing the bank-note as a money-issue, the policy of the Government favoring the expansion of this part of the currency is directly opposed to its policy restricting issues of Treasury-notes. Since the close of the Civil War there has been a growing sentiment favoring the payment of the outstanding National floating debt in the form of "greenbacks." Campaigns for "sound money" have been waged to reduce demand-credit-obligations and to secure the foundations of gold-standard currency-issues. One of the most threatening features of our whole financial system has been the relatively large amount of credit-money obligations proportionate to the reserve kept to enable the Treasury to redeem. The operation of the "endless chain" through the Treasury in 1893, the shock to credit, private and public, following the

threatened disappearance of the gold-reserve, the pledges of 1896, the currency act of 1900 increasing the reserve to $150,000,000, making the reserve a trust fund and securing it against impairment by giving to the Bureau of Issues and Redemption a first lien on the *current* assets of the General Treasury, the loan power placed in the hands of the Treasurer as a means of giving force to the instruction to maintain the gold standard of credit-money redemption, the increasing demands for the retirement of Treasury-notes and proposed legislation for making silver subsidiary, —all these acts and tendencies are directly antagonized by an increase in bank-note issues. By the inflation of the currency with paper issues in the form of collateral notes that may be arbitrarily injected into the circulation as a matter of high finance, gold and gold-bearing obligations of the Treasury may be supplanted and the money system itself may become unsettled.

Another dangerous feature of the practice of note inflation is in the possibility of increasing obligations for gold payment (for the note is ultimately reduced to this) without making any additional provision for gold redemption-reserves in the banks or in the Treasury. By law the banks must pay the notes if presented. In its original form the Law contained provisions for a redemption-reserve. This, however, has been repealed to further stimulate the investment of

Lessens gold reserves

bank capital in Government bonds. Having in it possibilities of increasing issues to such a point as to drive gold out of circulation it lays bare our credit-money system at its most vulnerable point. The danger is increased at two particulars: (1) The gold supply may by exportation become too small to support the credit-issues of the Treasury, without provision made for Government loans to stimulate gold importation; and (2) the paper-issues may become so far expanded that the present stock of gold may be found inadequate even though no exportation takes place.

That such a result is not beyond reason may appear in the experience of the last three or four years. Since the bond refunding acts and the Law of 1900, amending the Bank Act, this inflation of the currency has been marked. February 4, 1898, only $184,106,000 of National bank-notes were outstanding; February, 1900, the amount had risen to $204,916,000. One year later they had increased over $104,654,000. September 9, 1903, the amount of notes outstanding are reported as $375,037,000, and in July, 1904, the Treasury reported over $449,000,000 of bank-notes in the hands of banks and in circulation. And the increase still continues. The effect of the increase in bank-notes on the money circulation is identically the same as an increase of like amount in greenbacks would have been. The greenbacks and silver obli-

The recent increase in issues

gations remaining about the same, the bank-note has supplanted that much of gold, has made unprofitable gold importation, and at times has made profitable the exportation of the standard metal when otherwise exportation would have been unprofitable. For ten years we have been devising ways and means to retain a larger amount of gold as a foundation for money and credit. Since 1897 we have almost doubled our credit and increased our money circulation nearly $900,000,000. At the same time we have, by encouraging an increase in bank-notes, effectively barred the way to gold importation until the note expansion shall have reached a point to produce a shock in credit relations. Many editorials have been written in financial periodicals attempting to account for the gold movement, but, strangely enough, the influence of the bank-note inflation has been overlooked. The great public danger which lies in the assumption that a note-issue is not a loan to the bank without interest is to be found in the fact that such an assumption permits the bank-note to be made a part of the permanent money stock instead of forcing upon it an emergency character which will allow of its issue with profit only when the money-demand is increased, and will compel retirement when money-demands fall off.

The Assumption that "Deposits" by the Government are not Loans without Interest

The third dangerous assumption is, that so-called "deposits" of money by the Government are not loans to the banks without interest. Mr. Eckels pleads for treating the Government deposits in the same manner as customers' deposits. He holds that the attitude of the Government requires security for deposits is one which tends to discredit the bank.

Mr. Eckels' plea for deposits

This conclusion may be conceded to the extent that the Government is in need of active credit-accounts in the transaction of its business. The fact is, however, that at the time Mr. Eckels' comment was offered, the Government had on deposit with banks about $170,000,000, whereas its current needs, or its use for credit-accounts of banks, amounted to only from $5,000,000 to $10,000,000 as represented in the deposits of disbursing officers. The balance, something over $160,000,000, was an inactive account, and was in the nature of a loan to the banks without interest.

A business man who has from ten to twenty times as large a cash fund as is needed for current use, certainly would not be expected to keep this on deposit in a commercial bank, unless the commercial bank made an arrangement with him to pay him a liberal rate of interest on his deposit. Such an arrangement

would amount to a loan from the customer to the bank. When such deposits are made they are usually represented by certificates-of-deposit, or are under such agreements as to distinguish them clearly from the active accounts of customers. To argue that a deposit of all the revenues of the Government should be made with the banks, and that these should be considered as an ordinary customer's account, does not comport with the practice of banks nor with the business reasoning of those very men who are now using the argument for the purpose of bringing public opinion to support such a conclusion.

The "deposit" a loan

If the contention were that the Government should make such deposits, but that the bank was to pay a reasonable interest for the same, then there might be some ground of support to the argument. But in the same process of reasoning by which it is held that the Government should be considered in the same light as other depositors, the advocates of this doctrine also affirm that the bank "cannot afford to pay interest on such deposits." The result of such a transfer of money from the United States Treasury to the banks has been to encourage the banks in time of minimum money-demand to rely on the funds of the Government for the support of their own credit-accounts, instead of relying on their own capitalization.

How "deposits" without interest weaken capital support.

The weakening of capital support to bank-credit-accounts is not the only cause for public anxiety. The "deposit" of general funds of the Treasury leaves nothing to support the gold-reserve but bank-credit. Under such a financial plan we would have a credit-money that in time of special financial stress would find its foundation in the credit of the very institutions on which the greatest pressure is brought for money payment. Gold redemptions and the maintenance of the Treasury reserve when redemptions are made in emergency must fall on the bank. But the monetary disturbance does not end here; a "deposit" of gold by the Government causes the bank to dispose of gold previously held. This dislodgement of gold from the reserves also leaves the bank in a less advantageous position for redeeming its note-issues when demands may be made on these. The whole effect is the same as a credit-money inflation; it tends to increase gold exportation in time of minimum money-demand, and to accentuate or increase gold importation in time of maximum money-demand.

Makes the Government a disturbing factor

In appeals to the confidence of the public it is common practice for banks to advertise themselves as "Government Depository." The implication is that such a relation should commend them to the public. In the light of the present financial relations question might be raised as to whether borrowings

of this kind should not be used as a reason why the public should seek another institution for current credit accommodations. The conclusions just announced do not mean that the practices on the part of the Government of loaning to the banks by "issues" and by "deposits" may not be used to great advantage, and that this advantage may not be mutual. Such a result is possible, provided the practice is subject to regulation which will prevent the loan from weakening the institution of commercial-credit. To accomplish such results and to secure the advantage referred to, however, the Treasury-deposit to the bank must be properly considered as a loan from the Government to the bank, which is made under such conditions only as to provide a market in which the banks may obtain money by hypothecation of capital-resources at a fair market rate, when otherwise in the open market they might be forced to pay rates which would force a curtailment of commercial accommodations.

Possibilities in these practices

Chapter XIII

ADVANTAGES OF NATIONAL BANKS UNDER THE PRESENT PRACTICE OVER STATE AND PRIVATE BANKS

Two advantages enjoyed

Other conditions being equal there are two ways only, under the present practice, by which a National bank may enjoy an advantage over private and State banks: The first advantage lies in the possible increased income to be obtained from bonds used as a basis for "issues"; the second advantage lies in the possible increased income to be derived from "Government deposits." At the ruling market prices and the present rate of interest receivable, the possibility of obtaining an increased return on investments in Government-bonds without the issue-privilege is small, if not wholly lacking. A statement of the net investment-return on bonds as computed by the Government Actuary is as follows:

Investment-Return stated in Dollars per Hundred based on January Prices, 1895–1902

	5s of 1904	4s of 1907	4s of 1925	3s of 1918	2s of 1930
1895..........	$3.01	$2.76	–	–	–
1896..........	3.29	3.01	$3.21	–	–
1897..........	2.88	2.71	2.91	–	–
1898..........	2.55	2.33	2.55	–	–
1899..........	2.45	2.32	2.48	$2.54	–
1900..........	1.81	1.91	2.25	1.75	$1.85
1901..........	1.18	1.69	2.04	1.58	1.75
1902..........	1.67	1.72	1.90	1.	1.6529

Assuming that all of the Government-bonds held by a National bank are hypothecated for issues, and that "par value" be received in notes, these notes may then be used by the bank as money. They may not, however, be counted legally as a part of the reserve. If the notes are used to purchase "commercial paper" then the bank may not purchase more "paper" than it has notes, whereas an equal amount of legal-tender money held in reserve to support credit-accounts (deposits) would permit the bank to buy from two to four times as much of the commercial paper offered by customers (depositors). Such a use of the notes would therefore cause the bank to do business at a loss.

"Issues" compared with legal-tender reserves

The bank, however, may make the notes available for the highest banking return by paying them out in response to money-demands (as for example in settlement of balances due to distant banks) and hold the legal-tender money received as "reserves." This device permits the National banks to avoid the disability attaching to the "notes," which prevents the "notes" from being held as reserves, but for the same reason forces the bank-note into general circulation to supplant the legal-tender holdings. Assuming that the bank in question succeeds in thus exchanging its entire "issue" for legal-tenders, then the only disability which it suffers is the tying up of the amount

Elements of gain and loss

of its capital represented by the "margins," *i.e.*, by the "premiums," the "five per cent fund with the Treasury," etc. With these two factors alone to be considered, then, if the investment return on the bonds were two per cent, and the "margin," including the "premiums" and the "five per cent fund," were ten dollars per hundred (and if again it be assumed that one dollar in reserve will support four dollars of credit-accounts, and that the rate of interest in commercial loans were five per cent), then the margin of income lost to the business on account of capital invested in "margins" would equal two per cent or exactly the same amount as the income realized on the bonds. Under such circumstances the advantage to the National bank would be nil.

The same conclusion may be drawn from the computations of the Government Actuary found on page 33 of the Comptroller's Report, 1902. In this it is assumed that the notes may be invested at the rate of six per cent, and on this assumption the result exhibited is as follows:

2s of 1930	$6.62 per $100
3s of 1903	6.16 per 100
4s of 1907	6.19 per 100
4s of 1925	5.94 per 100
5s of 1904	5.96 per 100

Advantage small under present practice

Such a result does not show any considerable advantage from "bond investment and issue" as it would not be logical to assume that the "note" may be invested at any higher rate than could the "legal-tender

money" used to purchase the bond. Assuming that the note may be used with equal advantage, however, in the above showing, there would be a fraction of one per cent of profit on three classes of bond investments, and a fraction of one per cent of net loss on two others represented.

Possibilities of a loss

In this result, however, the assumption is that the "note" is as useful to the banker as are gold certificates or other forms of money. If this be an overstatement, then there may be, in truth, a loss to the bank on every class of bonds which is here made the basis for actuarial calculation. To say the least, the margin of net profit in "issue" is, in the judgment of bankers, so small that few have ever availed themselves of the maximum issue privilege. Quoting from Mr. Ridgely, in an address delivered on the evening of December 18, 1903, at a banquet given by the New York State Bankers' Association: "In the Report of the Comptroller of the Currency just made there is given a table showing the percentage of the issues outstanding to permissible circulation, from 1863 to 1902. The maximum of 81.6 per cent was reached in 1882, and the minimum of 44.1 per cent in 1892, and since the Act of 1900 it has been a little over 50 per cent, now being 53.32 per cent. It is hard to figure now whether there is any profit at all, as it depends upon the amount of notes which can be outstanding and the prices of bonds. On circu-

lation based on some classes of bonds there is a positive loss."

In the foregoing discussion the assumption has been that the banks which receive "issues" from the Government have desired to keep them outstanding, and the present practice conforms to the assumption made. When this is done, however, the question of advantage or disadvantage of "issue"-privilege must be considered as pertaining to a use of "issues" in lieu of "credit-accounts," for the purchase of legal "cash"-reserves. In the first case, there would be a positive loss in that the capital of the bank could not be used for banking purposes; in the second case, the increased income from bonds would not more than compensate for the margin of capital which is made unavailable — being invested in "margins." The point here made is, that viewed in the light of present practices (*i.e.*, looking upon the issues as a form of funds to be currently used as a part of the permanent money stock) the issue-privilege is of little or no advantage to the National bank, and in certain circumstances may stand in the way of obtaining the best business results.

"Notes" compared with "deposits"

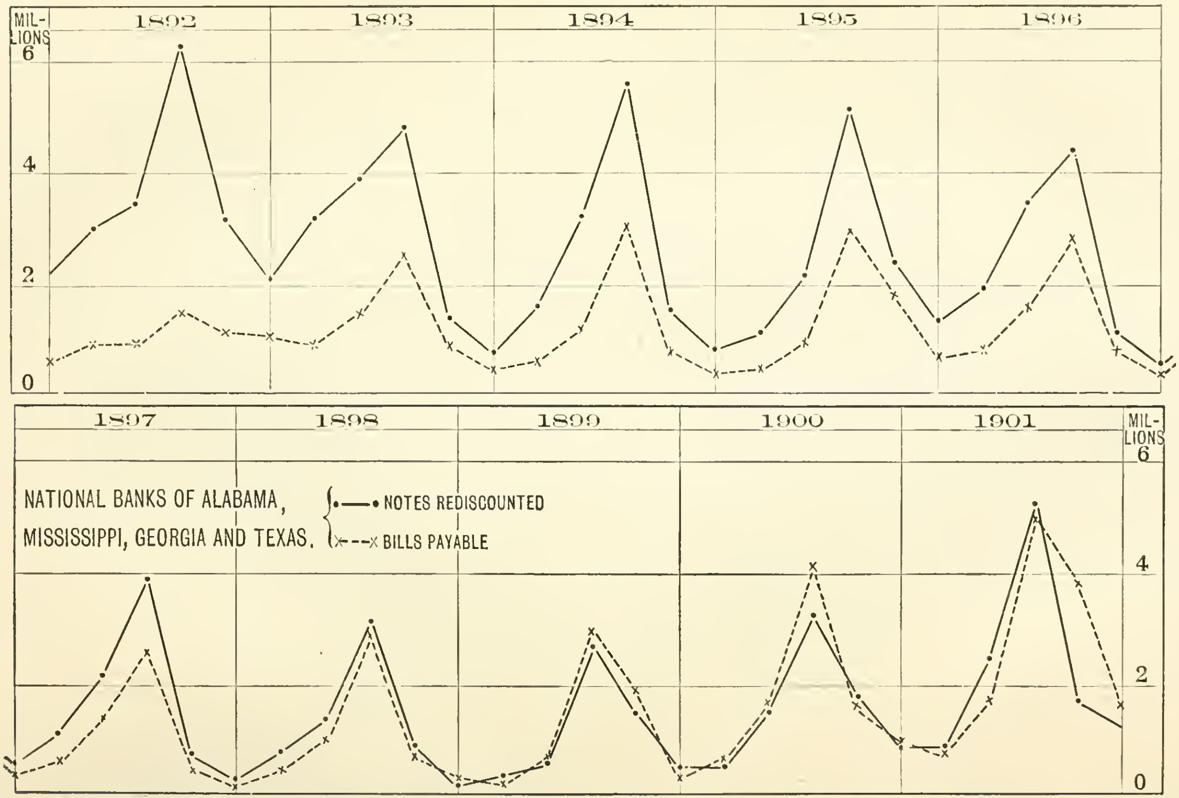
Advantages in the "Government Deposit" Privilege

The second special privilege accorded to the National bank by the Government (viz., the privilege of hypothecating invested capital-resources, or "gilt-

edge" securities, for Government loans) presents a somewhat more alluring prospect. By such an arrangement, under present practice, the money surplus of the Treasury is looked upon as a prize to be taken for the use of banks as "reserves" without the payment of interest, in exchange for demand obligations against which no "reserve" need be kept. The advantage in this is two-fold: (1) The money received from the Government does not suffer the legal disability placed on "issues." It is in the form of gold or demand obligations of the Government (credit-money) payable in gold. (2) It is procured at a less expense than "issues," not being subject to a tax, and being relieved from the cost of plates, from maintenance of a redemption fund, etc. Assuming that the amount invested in bonds is a part of the capital which would be permanently needed for "cash-reserves," and that the bonds were hypothecated, then the money obtained from the Government could be used to the same advantage as if it had not been invested in the bonds. The bank, however, would be required to use more capital to obtain the amount necessary for current redemptions. The only elements to be considered in estimating profit or loss in the practice could be found in the capital-return on the bonds and the amount of banking capital tied up in "margins." In this there might be a small advantage over the "issue." But

Elements of advantage

X. CHART SHOWING THE METHODS BY WHICH THE FLUCTUATING DEMANDS FOR CREDIT ACCOMMODATIONS IN THE COTTON STATES ARE MET



assuming that the amount so invested in bonds were a part of the "invested-reserve" (*i.e.*, the capital surplus over and above the permanent cash requirements), then the money obtained from the Government might again be re-invested to the same advantage as if no bonds had been purchased. Assuming that the margin were ten per cent and that the net return on the bonds were two per cent, the bank would obtain twenty per cent on the amount invested in the margin.

Reasons why the "Deposit-Loan" Privilege is more Advantageous than the "Issue-Loan" Privilege

"Deposit-loans" in emergency

It is not in this character of items, however, that the large advantage lies. The practice of the Government being to make "deposit-loans" only when emergencies arise, the National bank has a Government fund at hand to which it may apply for cash in time of greatest need. This practice is sustained by the history of nearly every financial stringency since the establishment of the National banking system, when the Government was in a financial condition to lend aid. During the period of forced liquidation from 1901 to 1903 the aid lent by the Government to the National banks was the most striking single feature in giving support to the money market. An addition of over $100,000,000 to the money-reserves of National banks by transfer from the Treasury within

a few months went far toward preventing a wholesale collapse in the overstrained credit of commercial banks, while they were slowly applying pressure to those who had obtained credit-accounts in exchange for collateral loans.

A private bank or a State bank in time of financial stress must look to the market for funds. To obtain money with which to maintain its credit-accounts, without curtailing loans to customers, it must convert some of its capital-assets. This may be done either by sale or by hypothecation. If by sale, then the bank must take the market price for securities, and on an unfavorable market must suffer an investment loss. If by hypothecation, then the bank must pay the market rate for money. The National bank, on the other hand, if it has "gilt-edge" securities "reserved," may obtain funds from the Government by hypothecation free of charge — *i.e.*, without payment of any interest at all. To illustrate this advantage: Let us suppose that the market for securities is five per cent below the price paid by the bank. To sell capital-resources under such conditions would entail a direct investment loss of five dollars per hundred. Again let us suppose that the market rate for money has risen to ten per cent in the market, then this extraordinary rate must be paid on hypothecation. Either circumstance would put the State bank or private bank at a disadvantage in competition with

Advantage of "emergency" loans without interest

the National bank, which may obtain "issues" or "deposits" from the Government on hypothecation of its investments.

The "issue-privilege" might be used with the same advantage as the "deposit-privilege" if the banks chose so to do. The difference lies in the practice of the Government rather than in the nature of the right. The "deposit-loan" privilege has been an opportunity extended for the conversion of "invested-reserves" or reserve capital-resources in time of emergency, thus seeming to increase the banking power; the "issue"-privilege is an opportunity to use "money-reserves" for direct investment, which seems to permanently increase the money stock without adding anything to the banking power. This conclusion is drawn from present practice under the National Bank Act, and does not reflect on the possibilities of using both privileges to a much better result.

"Issues not loaned in emergency

Chapter XIV

THE AMOUNT OF ELASTICITY FOR WHICH PROVISION IS TO BE MADE

An essay on elasticity and sound banking would be without bearing if it failed to consider the amount of fluctuations and demands for current funds. And such a consideration, to be of value, must have reference to commercial and financial experience, rather than to arbitrary conjecture. The current funds for which demands are made in business are of two kinds, viz., money and credit. Each of these has its own peculiar history and importance. Of fluctuations in total money-demands the statistics published by the Department of the Treasury are the best record.

Fluctuations in Total Money Supply and Demands of the Country

Variations in total national money-demands

The general money supply is increased or decreased by coinage and redemption, by importation and exportation. Aside from these, the factors of variation are comparatively insignificant. From the Treasury statistics it is found that the greatest variation

within a period of a single year since 1890, allowing for the average rate of increase, is about $244,000,000, or about ten per cent of the National money supply. It would seem that the fluctuation in total money supply of the country is not a serious matter — that the increasing and decreasing need of the future, as in the past, may readily be met through present agencies of coinage, issue, and importation without seriously disturbing the world's markets.

Greater importance of variations in specific demand

But the fluctuations in total National money-demand with respect to total money supply are not as significant as are the variations of supply and demand with respect to the several financial groups and institutions of which the National system is composed. This is true for the reason that within the National group specific variations of much larger proportions may be completely lost sight of. For example: Within a period of a year the Treasury may show a monetary loss of $250,000,000, while the bank-reserves may show a gain of equal amount. These fluctuations would not in any manner affect the total money supply of the country. Again, the banks might lose $250,000,000 from their reserves and the money in circulation among the people might increase in like amount. Such fluctuations would be lost sight of in an exhibit of National money supply and demand. Each year just such fluctuations as these rise like a spectre before thoughtful bankers.

As between the several financial groups there are three separate inquiries: (1) What are the fluctuations in the money-demands made by the Federal Government and by the several State treasuries; (2) what are the fluctuations in money-demands made by banks for money-reserves with which to support their credit-accounts; and (3) what are the fluctuations in the demands among the people for "till-cash" and "pocket-change," etc. As to these several classes of fluctuations in demand we may never have complete data.

Three classes of specific demands

Fortunately, however, we have reports and statistics from which a safe approximation may be reached. The Bureau of Statistics of the Department of Commerce and Labor furnishes monthly statements of changes in the money supply in the Treasury and in circulation. Five times per year the Comptroller of the Currency makes public the changes in National bank-reserves; several inquiries have also been made with reference to the daily averages of deposits and withdrawals of National banks by months; the State banking and fiscal reports furnish supplementary evidence for different sections.

Fluctuations in Demands on the Treasury

Giving consideration first to the demands of the Treasury, the widest variation from the average increase in fiscal needs during the last fifteen years has been about $160,000,000. This amount is well

within the customary money balance carried. But assuming, as now happens, that money-demands on the Treasury may increase, at a time when the revenues are decreasing, this customary balance may be threatened with extinction. Nevertheless, the problem of adjustment of Treasury resources to Treasury needs is not in itself a factor disturbing to business. Through the ample loan-power of the Treasurer, money may be obtained by importation at any time that a money surplus in the vaults of the banks is not available to the Government. It is only when the American money rate is low, when the money stock of private institutions is so large that they can afford to sell at rates far below the usual commercial rate, that the fiscal needs of the Treasury will be supplied from the banks. In other words, when the Government is forced on the world's market to obtain funds for its own needs, importation will serve to strengthen the National money situation. When loans are taken by our own people, such investments serve to deter speculative excesses coincident with a large private surplus. The monetary disturbances that in the past have arisen from Treasury needs have been due to threatened attack on the financial integrity of credit-money-issues of the Government or to the calling in of loans previously made by the Treasury to the banks. The purely fiscal transactions of the Government have served to strengthen,

Fiscal transactions have little bearing on elasticity

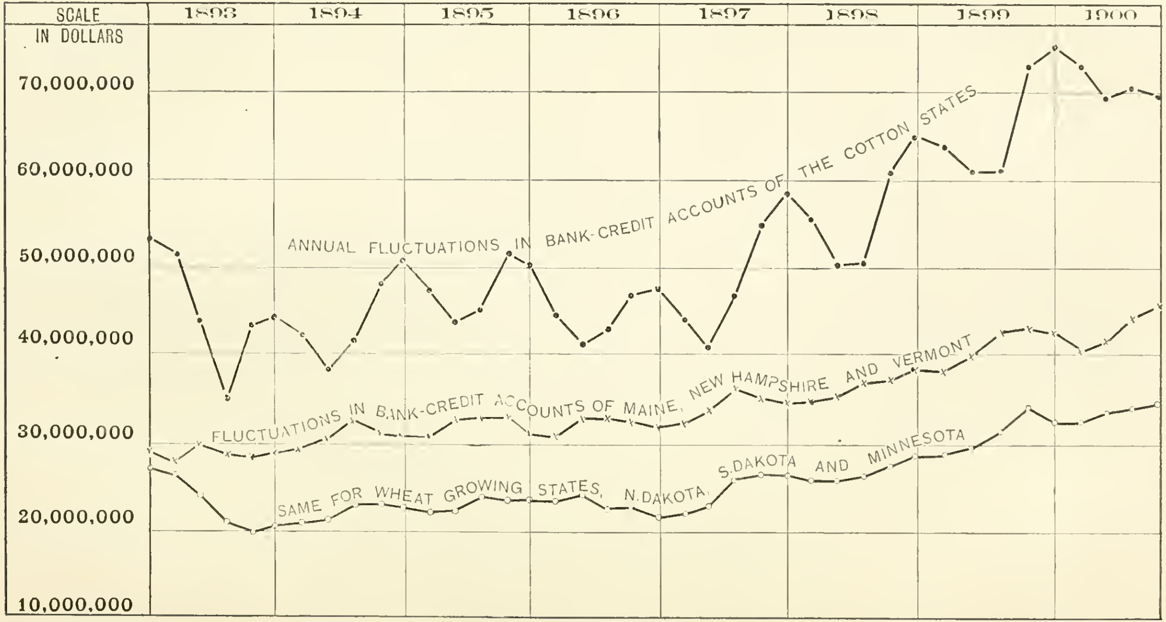
rather than to weaken, our institutions of private-credit.

The popular notion that the money in the vaults of the Government is abstracted from the money stock of the country is erroneous. Assuming that $150,000,000 were the average reserve carried in the general fund of the Federal Treasury, and that $100,000,000 were the average money-reserve carried in the vaults of State and local treasuries, this average reserve amounting to $250,000,000 would be taken, *not* out of the money stock available for business use in the United States, but out of the money stock of the *world*. If originally the Treasury reserves had suddenly been abstracted from the money

Notion that Treasury funds reduce nation's stock in trade

circulation of the United States, it would, by business necessity, soon become equalized by importation; and after an equilibrium had thus been established this reserve would no longer be a factor in the money market. Only the fluctuations or variations in this Treasury reserve would ever reach the exchanges. An increase in Treasury reserves without importation would operate to decrease the supply for other purposes. Conversely, a decrease in fiscal money supplies without exportation would operate to increase the money supply of the country which is outside of the Treasury. The effect of this increase or decrease, it is true, would first be felt by persons or institutions of first contact, but should the amount

XI. CHART SHOWING THE VARYING CREDIT CONDITIONS (1) IN THE COTTON STATES, (2) IN NEW ENGLAND, AND (3) IN THE NORTHWEST



of increase or decrease affect the funding needs of these persons or institutions of first contact, the demand or supply would at once be passed on through the market, and the equilibrium again restored.

Fluctuations in the Money-Demands of the Banks and of the People

From the point of view of elasticity the only money-demands that are serious, and therefore the principal ones to be considered, are those made by the banks as a means of supporting their own credit-accounts, and those made by the people for "till-cash" and for "change," etc. These two demands may be treated as practically the same, since the method by which money is obtained by the people is directly or indirectly to draw on the banks. The purpose of selling commercial paper or other bankable assets to a bank is to obtain a current fund for use in business. Under ordinary circumstances a customer prefers these funds in the form of a bank-account. But when occasion requires the bank may be asked by the customer to pay its account, and thus money is withdrawn from the bank-reserve. The banks stand in the position of a money market to the people. The banking business is one of selling money "short" and then making delivery "on demand." It is through the process of making deliveries on "short sales" of money by the banks that the reserves are depleted.

The chief fluctuations in money-demands of banks

The largest fluctuation from the average increase or decrease of money-reserves of National banks recorded during the last fifteen years is about $155,-000,000. This was under circumstances of extreme monetary disturbance, and a general condition of doubt, which in many localities amounted to actual panic. Assuming that this amount fairly represents the maximum fluctuations in money-demands on other banking institutions proportionate to their capitalization (and the assumption would seem a conservative one since the National banks are depositories for private banks, State banks, and trust companies), the extreme fluctuation in money-demands made by all banking institutions would not exceed $375,000,000. This may be taken as the degree of elasticity needed in the money circulation to meet the money-demands of banks, and, through the banks, to meet the money-demands of the public.

Amount of elasticity needed in bank money-reserves

Fluctuations in Demands for Credit-Funds

Turning to the question of elasticity for which provision is to be made in the other form of current funds used by the business community (viz., bank-accounts), the same process of reasoning may be followed. Taking the statistics of National banks five times per year as a basis for calculation, the largest variation in average decrease or increase within fifteen years has been about $875,000,000, or

about fifteen per cent of the average amount of active bank-credit at the time outstanding.

Using another basis for calculation of the extreme possibilities of fluctuations in demands for credit-accommodations which may be sought by the business community, the statistics of daily averages of deposits and withdrawals may be invoked. From the investigation made in 1903, it would appear that the average daily demand on National banks is about \$226,000,000, and that this average daily demand fluctuated by months from \$258,000,000 to \$200,000,000. In other words, from the month of January to the month of August there was a fluctuation in daily averages of about \$60,000,000. It also appears that the total amount of funds provided in the form of bank-accounts changed hands on the average about once in fifteen days — that is, that the average length of time for which the business man provides current funds needful to his business is about half a month. Assuming that \$60,000,000 is a maximum fluctuation in daily demands on National banks for credit-accommodation, and, further, that the active accounts of all commercial banking institutions is about \$6,000,000,000; assuming again that the credit fluctuations in other institutions are in like proportion to those of National banks, and that the average period for which credit-accommodation is asked is fifteen days; assuming further that this gross fluctuation in

Computation from daily averages

demand fell within the period of average loans, instead of within a period of a year, then the maximum fluctuation in demands for credit-accommodations would rise to \$1,800,000,000, or about thirty per cent of the active accounts outstanding. This would seem an extreme estimate as to the elasticity required under conditions most favorable to credit expansion.

Using the foregoing conclusions as a basis for determining the amount of elasticity actually needed to date, it would seem that the preparation to be made for response to fluctuating demands for money by banks amounts to about \$400,000,000 — *i.e.*, that provision for an emergency currency of about thirty per cent of the National bank capitalization would be adequate to meet every fluctuating money-demand without importation or high market rates. By the same criterion it would seem that the banks should provide for an increasing and decreasing credit fluctuation of from \$1,000,000,000 to \$1,800,000,000, or from sixteen to thirty per cent of the average volume of credit-accounts used as current funds.

Total elasticity required

How Fluctuating Demands Affect the Present System

Before reaching conclusions as to the manner in which this fluctuating demand for money and credit may be met, it may also be well to trace the effect of

demands on our system as at present operated. This can best be done by means of charts, which at a glance will give the results of many years of experience. Under our present practice the loan to reserve agents, or the "reserve deposit," is the form in which the surplus money of banks is invested in time of low demand. It is by the process of "calling" these reserve loans that the investing bank expects to restore to itself the funds loaned in time of money need. On Chart V is represented the money-demands made on all National banks of the United States by their customers, and also the demands made by investing banks on reserve agents. From this it conclusively appears that the demand for money made by customers on all of the many banks of the United States finally falls on the reserve agents — that is, through our peculiar system of investment of capital surplus all of the fluctuations in money-demands of the people fall on a few banks.

Money-demands of the country fall on reserve banks

Another fact quite as conclusively appears from Chart VI, opposite page 70, viz., that the demands made on reserve agents finally fall on the banks of the city of New York. Tracing the fluctuations on this chart it will appear that every variation in money-reserves held by banks of the country at large finds a similar variation in New York City banks. That this may the more surely be traced to the

The demands on reserve agents which fall on New York

"reserve" system, another chart is prepared (page 134), which shows the "amount due from all reserve agents" and the "amount due from New York City banks." The experience here recorded leaves no question but that the avenue through which money-demands reach New York is the "reserve bank."

Another clue to the situation is found in Chart VIII, opposite page 152. From this it seems that the amount due from New York banks to other banks, in every fluctuating detail, is almost exactly the amount of "money-reserves" kept by the banks of New York to support their own credit-accounts.

The borrowed money-reserves of New York banks

That monetary disturbance would occur under such circumstances is a conclusion which might be reached by conjecture; that monetary disturbances have actually occurred is a matter of history and experience. The record of the past and the evidences here presented can leave no doubt of the fact that under the present practice of investing capital-reserves in loans of other banks, every monetary demand falls directly on the banking centre and tends to throw the whole commercial-credit system into a condition of unrest — a condition which at times deprives outside banks of the support of central banks, and, again, forces New York banks to resort to Clearing-House certificates for settlement of money-balances among themselves, — a condition of financial paralysis to commercial enterprise. The

present method of supplying money-demands, a method which simply shifts the demand from one bank to another, is one of the features to be considered in devising ways and means to overcome present defects, and to give greater elasticity to the money medium and greater safety to banking institutions, without forcing the banks again to shift the fluctuating demand back to the constituency where it arises, thus standing in the way of extension of commercial accommodation when accommodation is needed.

Certain other features in credit-demands may be developed with reference to fluctuations and methods of providing credit-supply. From the charts of credit-fluctuations (pages 184, 202) it will appear that quite a different practice prevails in different sections of the country. In the cotton and tobacco States fluctuations in credit-demands are as regular as the seasons. In manufacturing Pennsylvania the variation by seasons is scarcely noticeable. To meet these local conditions quite a different method of capital equipment would seem to be necessary. That a practice prevails in the cotton States peculiar to themselves when compared with other sections would appear from Chart X, opposite page 176. In the cotton and tobacco section a large portion of the current credit given is procured from other sections by means of "bills payable" and "notes re-dis-

Conditions in different sections to be considered

counted." The fluctuations in these two items of account follow the seasons of crop removal with all of the precision that do the credit-accounts of customers. In a section of variegated industry such as that represented for comparison, this practice does not prevail. On the other hand, it appears that the necessity for meeting periods of extraordinary fluctuation, due to industrial depression and speculative reaction, is very much greater, and should be brought into the calculation of credit strain on redemption equipment.

Chapter XV

POSSIBILITIES OF ELASTICITY UNDER OUR PRESENT NATIONAL BANKING SYSTEM

Many writers have argued to the conclusion that under our present practice the bank-note has in itself no possible use as an emergency currency. To enlarge more fully on this position three reasons are urged why National bank "circulation" may not be increased to relieve a monetary strain, viz.: (1) That in time of *ordinary* money-demand the commercial constituency do not wish bank-notes for use in their business to any greater extent than they already use them; if they did wish more notes it is affirmed they would call for them at the bank in exchange for commercial paper or other bankable assets sold, instead of opening bank-accounts. In so far as note-issues are increased, therefore, the increase is in the nature of a substitution for other forms of money circulation. (2) That in time of *extraordinary* money-demand under the present practice, the bank has no power to extend either its money or its credit-accounts to meet the enlarged business need for current funds; the bank must literally buy

Reasons assigned for inelasticity in "issues"

its "notes" from the Government before issuing them; moreover, the "notes" must be purchased by use of the bank's credit, collaterally secured by United States bonds on hand and other collaterals, and these collaterals will cost them more than the amount, in "notes," realized; the bank which is in straits for legal-tender money, therefore, has no power to obtain "notes" from the Government. (3) That when so obtained, the notes may not be as effectively used as other forms of money, viz., legal-tender issues of the Government.

Elasticity as an Individual Banking Problem

The problem of elasticity to the individual bank is one which pertains to its own credit-accounts. Under a highly localized banking system a single institution cannot control the money supply of the nation; it cannot adapt general money supply to general money-demand. If a bank possess powers of credit-note-issue to meet the demands of its own customers for money, it would to this extent be able to relieve its own necessities and to this extent be out of the money market. But the principal money-demand made on a bank does not come from its customers; it comes from other banks. Under such a system as that suggested by the "commercial assets" school, there is no reason to suppose that other banks would accept these notes so issued in settlement of balances. Or,

Problem one which pertains to credit-accounts

if they were accepted, banking experience further suggests that the system itself would prove dangerous. Commercial-assets money-issues are safe only when provision is made for other banks to send issues "home" for payment as fast as they are received. When notes of other banks are promptly redeemed they operate in the same manner as do checks and drafts.

"Issues" cannot supply chief money-demand

Credit-money-issues by banks, if properly safeguarded, cannot materially affect the fluctuations in bankers' demands, and this is the chief fluctuation in money-demands to be provided for. Such issues may have the effect of supplanting the stable and constant money supply issued by the Government which is now used for "till cash" and "pocket change." That is to say, bank-issues might operate to drive gold, silver, and Government-notes out of circulation, but could not supply the demand made by one bank against another. As near as may be estimated from statistics at hand, the constant money-demand for "till cash" and for personal uses is at present about $1,600,000,000, or 70 per cent of the money outside of the Treasury. This stable or permanent circulation might be supplied by the credit-note-issues of the bank, but to make such a circulation sound it would be necessary for the banks to increase their capitalization to carry the credit-money-load which is now on the Treasury — a charge

on capital equal to about fifty per cent of the present redemption equipment of National banks.

The possibility of the individual bank solving its own problem of elasticity in credit-accounts under the present Law, however, is not wanting. This may be done through adequate capitalization and adequate redemption equipment. As before indicated, the only limitation to the amount of credit-accounts that a bank may carry is to be found in its unimpaired capital; the only limitation to the possible elasticity in the credit-accounts of such an institution is to be found in the amount of redemption equipment which it provides for itself. If the minimum of credit-accounts demanded by its customers is $500,000 (assuming that twenty-five per cent is an adequate cash-reserve to meet all demands on its current obligations), then the minimum capital support required would be $125,000. If the maximum demand from customers for credit-accounts is $1,000,000, then, under the same assumption, the maximum capital requirement would be $250,000. But in order to make possible this $500,000 expansion of credit-accommodations the bank should be capitalized to meet the maximum redemption requirement.

Individual bank may provide elasticity in credit-accounts

Assuming again that all the redemption equipment were invested, except such portion as is necessary to be carried in cash as a twenty-five per cent money-

reserve to support credit-accounts outstanding, then when the demand for customers' accounts is at a minimum the bank, if capitalized at $250,000, would have $125,000 of its capital invested and temporarily held as an income-producing asset awaiting an increase in money and credit-demands. The only question in determining ability to expand accounts to meet increased wants of customers would be in the character of these capital reserve-investments held — that is, a question as to their immediate convertibility into cash. Should it at any time appear that a bank were unable to meet demands for current credit-accounts or for cash, this inability would arise from one of two occasions: (1) a too small capitalization, or (2) an unwise investment of surplus capital for purposes of redemption reserves.

Power of expanding credit in its own hands

Possibilities of Elasticity in the National Banking System as a Whole, without Change in the Present Law

The possibility for elasticity in the National banking system as a whole under the present Law differs from that of the individual bank in this, — that a system of banking such as the National banking system, including within it over 5,000 different banking institutions, makes possible a degree of elasticity in the money circulation adequate to meet the fluctuating money-demands of the nation, as well as a degree of

May give elasticity to money circulation

elasticity in the credit-accounts of individual banks sufficient to meet demands of customers. While one bank, with its comparatively insignificant capitalization, can do little to affect the money market, 5,000 banks can do much. Under the present Law the possibility for money expansion and contraction to meet commercial demands lies (1) in the "issue-privilege" and (2) in the provision made for Government "deposits." The National banks alone enjoy these privileges. The "issue" powers not only give to National banks increased facility for the conversion of their invested redemption equipment into cash by hypothecation, but also furnish a method under the present Law whereby an increase in the money circulation of the country may be effected without importation and without disturbance of the money-funds of the National Treasury.

But such a result may be attained only by cooperration on the part of the many banks of the system by which the various individual institutions making up the system would refrain from hypothecating their bonds in time of minimum money and credit-demands, and would hold them as an unencumbered capital-investment ready for hypothecation when money-demands might increase.

Amount of elasticity which may be given

The amount of fluctuation in the money-demands made on National banks has never exceeded $100,000,000. The total amount of bonds owned by National banks, July, 1904,

was over $450,000,000. The total fluctuating money-demands of the entire country has never exceeded $150,000,000. If the capital invested in bonds by National banks alone were used for the purpose of supporting the fluctuating banking and business demand for money, instead of being employed as a means of supporting the bond market and for increasing the *permanent* money supply of the country, this capital investment would be adequate to meet every need for elasticity in the money medium.

The elasticity thus given to the money circulation would be in response to money-demands made through the banks. In other words, the elasticity would be provided through those institutions upon which demands were made. Such a practice would supply the *fluctuating* banker's needs for money as a means for payment on credit-accounts, as well as the *fluctuating* popular demand for "change" and for other personal payments, which give rise to drafts on the bank. This adaptation of money-supply to money-demand would be in direct support of expanding credit-accounts of banks, and this use of capital investments in bonds owned by banks would admit of a sudden increase or decrease in credit transactions during a period of fluctuating demand of at least $1,600,000,000, while the greatest fluctuation in the accounts of National banks during the last fifteen years has been only $350,000,000.

May give elasticity to credit-funds

How the Credit-Accounts of National Banks may be made Elastic under the Present Law without the Use of the Issue-Privilege

The possibility for elasticity through issues is quite equalled by the possibility for elasticity without issues. The difference is this, that the issue-privilege makes possible elasticity of the money circulation as well as credit accommodations without importation and without disturbance of the resources of the Treasury, while the elasticity provided for under the Law without issues ordinarily would involve a drawing down of Treasury resources and possibly an importation of gold. The second possibility of increasing elasticity lies in the privilege before discussed — the privilege granted to the National banks to receive "deposits" from the Government upon the hypothecation of securities acceptable to the Treasurer. The deposit-(loan)-privilege is accorded to National banks as a means of making the Treasury surplus available to them for money-reserves in time of need. It is a happy supplement of the issue-(loan)-privilege.

Elasticity without issues limited to credit-accounts

This provision of law under the recent decision of the Treasurer allows the banks to hypothecate not only United States bonds on hand, but also other "gilt-edge" securities, discretion as to the advances to be made being left with the Secretary. By a

proper use of this privilege elasticity may be given to the credit-accounts of banks and much relief may be afforded to the community seeking accommodation. Such a use of the deposit-(loan)-privilege has in it the possibility under favorable conditions of making practically all the surplus capital-resources of banks (that may have been conservatively invested) immediately convertible into cash, by hypothecation, when cash is needed to keep up the lawful money-reserve of banks, which in turn may be used to increase credit-accommodations. By such a practice the entire money surplus of the United States Treasury might be used as a subsidiary money-reserve to the money-reserves of commercial banks. This added facility for immediate conversion of investments into cash has its chief significance in the fact that, while money may be withdrawn from the Treasury (at such times as the Treasury may have a surplus available) the credit-accounts of banks may be expanded and adequate support may be given to them in money-reserves without appeal to the money market and without disturbance of money rates.

Attainable without disturbing the money market

There may be, however, few conditions favorable to the use of the Government deposit (loan). The hypothecation of investments with the Government as security for these loans (sales of money by the Government to the banks) depends upon the coinci-

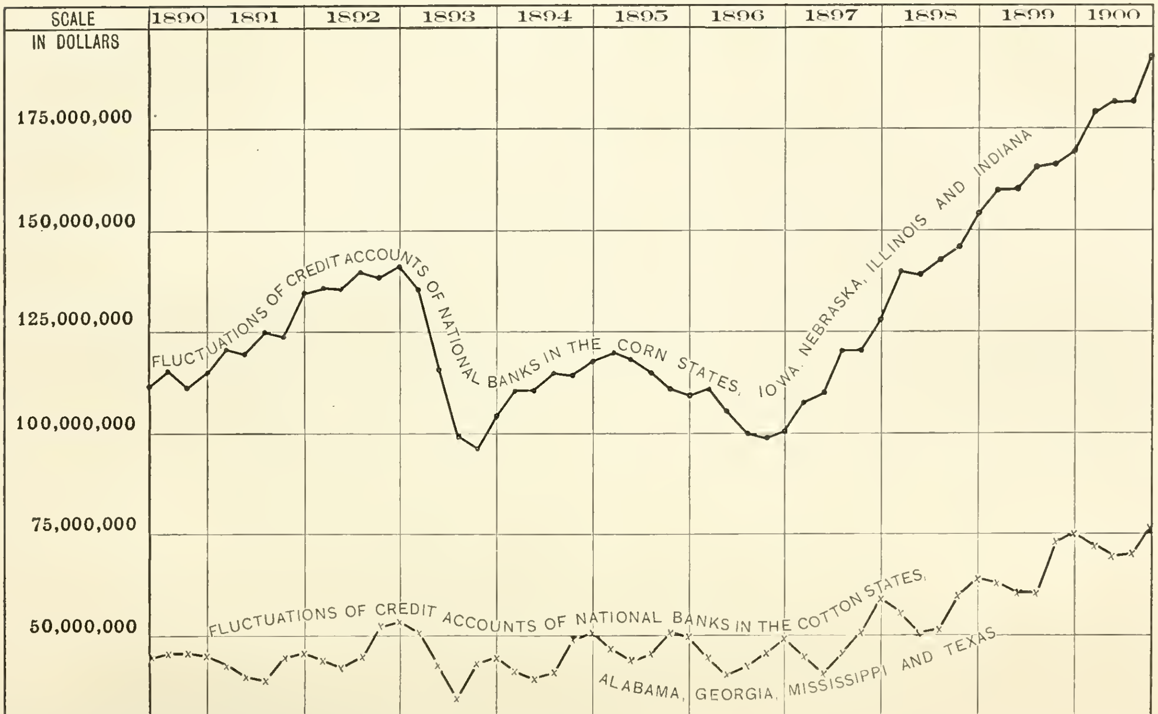
dence of a disposable Treasury surplus with a banker's pressing need. It has happened that during the years 1898 to 1902, with foreign importations increasing faster than Government expenditures, the Government had a surplus of money in its vaults which was available to the banks without serious inconvenience to the Treasury; 1903 and 1904 find other conditions prevalent at the National capitol. The same has been true of every period of trade reaction and financial retraction.

Conditions under which this would not obtain

When tariffs have been lowered or the American commodity market has been less favorable to importation, the Government has not had a large loanable money surplus. In fact, it has usually happened that during such periods of depression the Government has not been in a condition to lend a helping hand to private institutions. The situation has ofttimes been reversed. Deposits or loans previously made to the banks must be recalled as a means of meeting the deficit created by the excess of expenditures over receipts. Owing to this fact, under the present practice the loan-deposit has proved a somewhat dangerous device. Under any circumstances, the possibility of gaining support from the Government is highly contingent and not to be permanently relied on as a safeguard against inelasticity. At best it must be treated as an auxiliary support, but

Conditions under which disturbances would be increased

XII. CHART SHOWING THE VARYING CREDIT CONDITIONS IN THE CORN STATES HAVING VARIED INDUSTRIES, AS COMPARED WITH THE COTTON STATES



nevertheless, at such times as it may be used, it may be one of the most efficient supports to credit conceivable.

Possibility under the Present Law of Increasing Elasticity of both the Money Circulation and of Credit-Accounts through the Loan Market

There is under the present system a third possibility of making capital assets in the form of redemption equipment immediately convertible into cash without forcing a contraction of commercial accommodations. This possibility lies in the practice of so using the invested-reserve as to make it an instrument of immediate conversion in the loan market itself. The general loan market is the third resort for a National bank, but it is available to all banks and persons doing a banking business. A bank which finds its money-reserves running low may obtain relief from other banks in the community by hypothecation or by sale, unless these other banks are under similar constraint, in which case banking relief must come from outside. The condition precedent to such a use of the money market, with its powers of money importation, is an adequate unencumbered invested-reserve. If a bank has an adequate amount of "gilt-edge" capital assets it may at all times obtain money to support an expansion in its credit-accounts, whether or not it has Government "issue"

Elasticity through convertible investments

and "deposit" privileges. For such an institution the problem of elasticity is solved.

This elasticity may come through the employment of idle funds already in the community or by a process of money importation from the outside world. In a large banking community there are always to be found many customers of banks and other persons having accounts or claims against other financial institutions in the immediate locality who are willing to exchange these accounts or claims for good investments. The inducement which brings out these funds and makes them available for current use is the offer of increased investment return. A bank which needs $50,000 in money, by offer of an increased rate of interest may find among its own customers (depositors) those who are willing to purchase $200,000 of the bank's "bills payable" or time-notes secured by stocks, bonds, or other available assets, the effect of which would be not to increase its money-reserves but to reduce its outstanding credit-accounts (deposits) of customers. Such an adjustment would relieve the strain on its money-reserves without restricting its commercial-accommodations. Again, through bankers or otherwise, the bank might find customers (depositors) of other institutions who were willing to purchase $50,000 of its "bills payable," secured by the hypothecation of reserve capital-investments. Such a disposition

Possibilities without appeal to the market

would have the effect of giving to the bank hypothecating its securities credit-claims against other institutions amounting to $50,000, which amount might at once be transferred to its own vaults. This would put the bank in a position to support outstanding commercial-accommodations without calling loans. The great investment companies, old line insurance, savings banks, etc., have large current means that may be made available by secured loans. By similar process, when the domestic loan market may not furnish the desired money-reserve, foreign negotiations might set up a gold balance by importation. But any method of safely meeting money-demands requires an adequate unencumbered capital reserve; adequate support to commercial banks by the loan market and investment companies would require the discontinuance of paying interest on deposits by which commercial banks in ordinary time borrow all available funds of these institutions.

How the market is reached

One Obstacle in the way of Elasticity without Legal Enactment

As has been suggested, the elasticity to be given to the circulating medium of the country, whether in the form of money or in the form of credit-accounts, must come by cooperation of the many banks of the National system. It is in this that the improbability of securing such a result as that outlined obtains.

In the first place, the banks do not do business that way. In view of this fact, even if a majority of bankers were of the opinion that such a change might be advantageous, they would not be willing to alter their methods unless general cooperation were assured. Against a change which would have such a degree of uniformity as would insure the elasticity desired is set all of the force and inertia of custom — a factor which requires the strong arm of law and the closest supervision of Government to overcome.

Voluntary cooperation to this end improbable

In the second place, a very large majority of bankers have not this view of the case. In fact, judging from expressions made, many influential bankers would favor changes in method which would still further lower the percentage of capitalization required to business transacted. In the third place, to effect such cooperation in the interest of the greater elasticity needed, certain practices and collateral employments of banking capital would have to be abandoned. There has been a growing tendency toward underwriting. The class of securities commonly underwritten is not such an investment of capital as contributes to elasticity. There has been a growing tendency toward banking consolidation, by which the surplus capital of controlled banks is loaned to (deposited with) the controlling bank, without any increase in capital strength being effected through the consolidation. Investments in

the accounts of "central" banks may lend themselves to the purposes of an individual bank or group under ordinary circumstances, but conversion of these investments into money to support local demands weakens the credit-support at the centre. Such a disposition of capital does not contribute to elasticity in the banking system as a whole. In fact, it has two effects directly opposed to elasticity and soundness: (1) it weakens the capitalization of "central" banks, and (2) it ties up the capital of the "depositing" bank in such a way as to render it difficult to bring money into the system from without as a means of meeting increasing demands.

Chapter XVI

POSSIBILITIES OF INCREASING ELASTICITY BY SIMPLE MODIFICATIONS OF THE PRESENT LAW

Elasticity is the need — the problem is to supply it. To re-state a conclusion reached in the preceding chapter, the present system will admit of an adequate measure of elasticity if bankers were brought into cooperation to this end. The impelling force in the present practice — a practice which stands in the way of cooperative results — is the constant desire to lower capital-cost of banking operation. This motive must be reckoned with. It is ever-present in all forms of business. It is the desire to obtain the largest income possible at a given capital-cost and current-expense that gives point to the administrative devices of every institution conducted for gain. It has been the effort to lower cost and to increase profits (at times ill-directed) that has made necessary legislation for the inspection of mines and factories, and for the introduction of safety appliances to the physical equipment of enterprise.

The need for legislation to secure cooperation

The same necessity lies back of the present need for legislation requiring greater business safety or

"soundness" in the redemption equipment of commercial banks as a means of securing increased elasticity and better banking service. It is through compulsory legislation that a uniform practice may be introduced. Under circumstances of competition, reforms which require an increase in capital-cost can be attained in no other way. The drift of the banking legislation of the past has been toward the imposition of requirements that will bring to the public protection against insolvency of individual banks. The demand of to-day is protection against the operation of the system as a whole — the contraction of credit-accommodation as a means of protecting the banks. And as past legislation must be recognized as of advantage to the banker as well as to the public, the same result may be predicated of a further evolution of our system of commercial credit to adapt it to the increased needs for a more sound and a more elastic medium of exchange.

To benefit the bank as well as the public

Changes in the Law to Increase the Soundness of Credit-Accounts

In the many plans proposed for increasing the elasticity of bank-issues and bank-credit, the element of the business safety of the latter has been ignored. An underlying fallacy has been entertained, viz., that the problem of elasticity may be solved without increasing the financial strength of those institutions

offering current credit-accounts for sale. But increased financial strength must come at a cost. Greater soundness of credit can be had only through reinforced redemption equipment for meeting the demands for money payment, and redemption equipment must be procured by capital investment. Larger and better facilities for rendering banking service are made possible only by means of stronger and improved machinery for credit support. In banking, as in other undertakings, experience has taught the lesson that without adequate capital-resources both the institution and the public may suffer many times more than the price of safety. Initial capital cost of equipment, however, must be met, and met by those who undertake the banking business.

An Amendment of the "Money-Reserve" Section of the Bank Act

The first change in the Law looking toward increased elasticity is one which would require increased capitalization and at the same time would take away the inducement to invest the capital surplus of the bank in a comparatively weak and dangerous form of redemption equipment. The oft-repeated recommendation of Comptrollers and of financial writers for the repeal of those sections of the Bank Act which permit one bank to loan a portion of its capital to another at interest is here invoked — a

repeal of the clauses pertaining to "reserve deposits." It is unnecessary to re-state the dangerous character of this device, — that a "deposit" is a loan; that a loan is a sale of money for credit; that the "reserve deposit" at best cannot be more than a capital investment, but too often is obtained by exchange of credit; that in times of money strain it shifts the burden from one bank to another; that such a device does not permit of the use of capital to effect an increase in the money-reserves of banks or an expansion of credit with safety; that it hampers the operations of the use of bank capital in such a manner as to make elasticity in money circulation and in current credit-funds of the nation impossible.

Re-statement of defects in "reserve" law

A deposit with another bank for the purpose of meeting exchange balances may be properly considered a part of the "cash" requirement, but for obvious reasons it may not with public safety be considered as a part of the "invested-reserve." In so far as a deposit with another bank is considered as cash, the use of capital for the purpose of obtaining such accounts should be restricted to the need for redemption of exchanges; this restriction may be effected through the Act by a prohibition restraining one bank from paying interest on the "deposits" (loans) of another. As has been before pointed out by financial writers, such a prohibition would take away the inducement to this

Effect of prohibiting interest on deposits

form of investment of capital surplus. Without an income inducement, a bank would carry no larger deposits with other banks than would actually be needed for an exchange base. Besides, in case a commercial bank were not permitted to pay interest on deposits, there would be no inducement for trust companies, savings banks, and insurance companies to carry large credits with them. Or, to put the same relation in another form, the commercial banks would not become borrowers of money from these institutions as a means of supplying themselves with "money-reserves" to meet ordinary demands of customers on credit-account. Such a complete segregation of the funds of institutions of current account, from investment institutions, would do much to give stability to general financial conditions. The investment institutions would carry a line of short-time papers, to be sure, and among these short-time investments might be secured bills payable and rediscounts of commercial banks. But such a practice would make the current revenue of investment institutions an auxiliary support to the commercial banks when support were needed, instead of making the commercial banks the money market as well as the credit market, a plan which would make the various investment institutions and the Treasury of the United States independent and prominent factors in the money markets, and do much to place the banks in a position to gain support for the credit market.

The "reserve" Law as it stands has proceeded from a popular misconception that a bank "deposit" is an amount of money owned by the depositor.

Misconception as to meaning of "deposit"

This fallacy is made use of by banks themselves in their dealings with customers, and by customers in thinking about banks. A familiar instance of such use is seen in advertisements of the financial condition of banks as a means of soliciting public confidence in their paying ability. In almost any banking journal such a display as this may be found:

THE FIRST NATIONAL BANK OF ECONOMY FALLS

Capital	$100,000
Surplus	100,000
Total Capital and Surplus	$200,000
Deposits	$1,500,000

The above is assumed to be a statement of financial strength. If the advertisement were written to speak the truth it would be something as follows:

Capital and Surplus	$ 200,000
Call Loan Indebtedness	1,500,000
Excess of Demand Indebtedness over Capital	1,300,000

A credit-account to a customer is a contract for the future delivery of money — a deal in "futures." The bank sells to its customers (so-called depositors) its contracts for the future delivery of money. These contracts are due on "call." They have not even the time usual on boards of trade and stock exchanges where "puts" and "calls" are dealt in. In

stock transactions a "future" is usually entitled to at least one day's notice before delivery is to be made.

"Deposit" an investment in "futures"

Institutions of commercial-credit do not reserve this privilege, and if they did make such reservation the utility of their credit to customers as current funds would be destroyed; they would stand in the same position as savings institutions. The commercial bank must deliver at once, without notice, or admit its insolvency, and with such admission sacrifice all claims to public confidence as a basis for future credit sales.

After several decades of experience we established a law requiring banks to keep a certain minimum proportion of money-reserves to demand-credit outstanding. A prescribed ratio of "cash" to credit-accounts outstanding should be established — "cash" to include both money-reserves and exchange-balances. It should be permitted, however, that these may be used for the satisfaction of immediate demands.

Should require cash-reserve provided out of capital

But the law should also require that this "cash"-reserve, including money and exchange-balances, should be provided out of capital. It should further require that every subsequent increase in credit-obligations should be supported by "cash" provided by capital investment. Such an amendment would prevent an expansion of credit beyond ability to support it, and would be equivalent to saying that a bank should capitalize its *maximum* instead of its *minimum*

credit-redemption requirements. As a result of such an amendment the bank itself, to increase its own income, would see to it that such portion of its redemption equipment as was not immediately needed, when credit-demands were not at a maximum, was invested in assets immediately convertible into cash.

An amendment of this one feature of the Bank Act by repeal and by substitution of a provision authorizing the banks to invest their surplus capital-resources in first-class marketable securities only, to be accounted as an "invested-reserve" and to be considered as a part of the redemption equipment held as a basis for credit support, would at once add over $400,000,000 to the assets of National banks available to procure money by sale or by hypothecation without disturbing the credit relations of other institutions. Such a change would greatly increase the possibilities of credit expansion in time of need. This increased strength of equipment can come from the superiority of investments of present capital employed as banking equipment. In every other relation the Law has recognized the investment of one bank in the liabilities of another as a policy not to be supported. Commercial banking institutions have failed, and until such a change is made they always will fail, to support an extraordinary strain which is general enough to reach the central bank. The present reserve provisions always have operated and,

Increase in elasticity of money-reserves as a result

under similar conditions, must operate to force a reduction of loans with increased money-demand.

Moreover, such an amendment of this feature of the Bank Act would take out of the National banking system at the reserve centres over $400,000,000 of money that is now held there as an invested-reserve, but which is used by these central banks for the support of a much larger volume of credit represented in call-loans and other speculative assets — a kind of security that is of little use to any kind of business that should be supported by commercial banking capital. The "call-loans" of National banks, as well as the call-loans of other institutions which depend on the money-reserves of National banks, are speculative loans. These loans are usually incurred as a means of carrying on margin speculation. This is about the only kind of business to which a call-loan is adapted. Under the present practice the National bank has become the mainstay to the speculator. In an emergency the National bank finds itself at times tied hand and foot with the man whose only interests lie in market fluctuations instead of in producing goods and marketing them. When gradual liquidation may be effected the banker may protect his commercial constituents against the speculative judgments of professional traders. On the other hand, when the strain is sudden and danger is imminent these call-loans may not be made available to

Increased independence of individual banks

protect commercial-credits. But even if by forcing liquidation the banker is able to preserve his own institution intact, the result is a shock to the community and it reacts unfavorably on commercial and industrial enterprise.

Repeal of the provisions referred to would not only increase the elasticity of commercial-credit-accounts but would also purge the commercial bank of its most dangerous constituency. It would compel the speculator to seek call-loan accommodation with institutions and agents specially capitalized and equipped for such service. Such a change in the Law would also require the conservative banker to seek other investments for his surplus money-reserves, and by this means would leave intact the capital-resources of commercial banks for commercial-credit support. It would tend to break down the practice of commingling capital assets of banks, would place each individual institution on a more independent footing, and would sever the bonds which have so frequently dragged all down into a common pool through the weakening or breaking of some central support. The individual banker would be banking on money-reserves and "gilt-edge" investments instead of basing his own credit on the credit of other banking institutions which in turn look to speculative or other customers for support in emergency — a system which brings the results of bank-credit over-expan-

Would purge system of dangerous constituency

sion down on the heads of those engaged in commerce and industry.

Amendment Requiring a Minimum Proportion of Redemption Equipment to Maximum of Credit-Obligations Outstanding

An amendment directed toward adequacy in capitalization would not be complete without a clause requiring a prescribed proportion of "redemption equipment" to the maximum credit-funds disposed of for the accommodation of customers. As a matter of public safety a bank should not be permitted to incur credit-obligations in excess of a prescribed ratio to unimpaired capital. That is, instead of the money-reserve being a criterion by which to gauge the soundness of credit-accounts, the law should adopt the measure of unimpaired *capital available for redemption purposes.* Such an amendment would have the controlling effect: (1) Of imposing on the Comptroller of the Currency the inquiry as to what part of a bank's capital is tied up in "banking-house and fixtures," in "real-estate," in "mortgages," and in "other investments" not available for the support of credit-accounts, such as "underwriting," etc.; (2) of making it the duty of the Comptroller of the Currency and of examiners to inquire into the amount of capitalization remaining after procuring "redemption equipment"; (3) of requiring a specific accounting for the

Controlling effect of such an amendment

character of "redemption equipment" held — what portion in cash, what portion in investments — and as to cash, what portion is held in the form of money-reserves, and what portion in the form of exchange accounts; (4) of compelling a report in such form that this total redemption equipment may be compared with the maximum of credit-obligations to be redeemed. At present no question is raised so long as the money-reserve bears the prescribed proportion to "deposits." This money-reserve may have been borrowed; it may be swelled by padded or "mutual" balances.

The bank's capitalization may be inadequate to support even the minimum of credit-accounts. No inquiry is made as to the character of redemption equipment other than cash. In fact, a Comptroller of the Currency has been known to say that so long as the loans of a bank are good there is little need for investigating further. A prominent banker also announces as his belief that if the cash-reserve is kept intact it is of less importance to know that the "stock, bonds, and other securities" held are properly represented in financial statements than that the "commercial assets" are not to be written down. These opinions have in them much of truth, but not for the reasons assigned. It is necessary that loans be good, for the reason that any loss on this or on any other account is a capital loss. There can be no other kind of loss in

Need for a change in the principle of control

a going business; only an insolvent can saddle losses on creditors. Assuming that all the "commercial assets" are good, a bank having capital-assets which are unavailable and of questionable character (while it may be able to liquidate on "winding up") will not as a "going concern" make an efficient banking institution. In case the money-reserves are not provided for out of the capital, the bank is a constant menace to the community. As a going concern every extraordinary demand will be forced on customers, and the community will experience a periodical restriction in funds available for current use such as will make commercial judgments uncertain and enterprise extra-hazardous. It is to remedy just this defect in our present banking system that the present agitation for elasticity is being carried on. The Law must have regard for public welfare rather than the solvency or insolvency of an individual bank.

An Amendment of the Bank Act to Enjoin the Payment of Interest on "Issues" to Banks

A third change in the Law in the interest of elasticity has been suggested. Writers and publicists have called attention to the fact that underneath the present Law a small, almost nominal tax is imposed on issues. Throughout the course of banking legislation, and in most of the recent proposals directed toward reform, an assumption has run that both the bank and the Government may use the same capital

at the same time, without weakening the resources of either. The Government is in need of gold. It offers its bonds for sale, and as a means of availing itself of a better market holds out to the bank an inducement to buy. The inducement offered the bank to part with its gold is this: That the bank may continue to receive the interest on the bond and at the same time have its face value in notes to use as money. In this transaction the presumption is that the notes *will not* serve as an elastic medium; the presumption is rather that the amount of notes issued will, at once, be added to the *permanent stock* of money in circulation. The present nominal tax is based on the same theory as the plan of issue — a high tax on notes would reduce the inducement to purchase bonds and in like degree would depress the bond market. The ten per cent prohibitive tax on State bank issues proceeds from the same conclusion.

A use of the interest rate to regulate circulation

The bond market is no longer a matter of public concern. On the other hand, an elastic currency is an end desired. If, in the framing of a banking law, all question of Government-credit were abandoned, and a tax were laid on issues (or interest were charged on the Government loan of "issues") for the purpose of regulating their use to meet the *extraordinary* money-demand — if, in other words, an elastic currency instead of a bond market were made the object of legislation — it is contended that elasticity may be at-

tained without abandoning the principle of *safety* found in a *secured note* circulation. For purposes of illustration, let us assume that the varying needs for money during the year did not fluctuate more than $300,000,000. Then the use of the $449,000,000 of bank-notes already outstanding might be regulated by interest charges as follows: Issues (loans) to the extent of five per cent of the capital of National banks or an amount ample to cover the active accounts of disbursing officers might be at the rate of one per cent as compensation for the use of the banks as disbursing agents of the Government. Such a low interest rate on a small portion of the "issues" would also have the effect of keeping a small amount of "issues" in circulation to guarantee the ready acceptance of the bank-note by customary use. The balance (something over $400,000,000) might be charged for at a rate which would make this amount of authorized issues an emergency money-reserve. To follow this principle of regulation a little further, a portion of the $400,000,000 reserve medium (let us say two-thirds) might be taxed at a rate slightly above the *usual* commercial paper rate, and the remainder at a still higher rate to preclude its use except when the emergency became extreme.

The proposition is not a new one. The principle has been several times proposed under the name of a "tax," but has met with little support. The banks have not favored it for obvious reasons; the public

has not seen the need for such a restriction on the issue of notes by banks as will take them out of the permanent money stock and at the same time force the banks to strengthen their capital-resources (*i.e.*, to require them to do business on their own capital, under *extraordinary* as well as *ordinary* conditions); they have not considered the necessity of compelling the less provident of commercial banking institutions to furnish out of their own capital-funds a redemption equipment strong enough to make secure their credit-accounts (so-called deposits).

Why proposition has not received support

The Strength and the Weakness of Secretary Shaw's Proposal

Financial disturbances between 1902 and 1904 lend force to the reasoning which lies back of such a demand. Secretary Shaw in an address before the National Association of Merchants and Travelers at Chicago has become an open advocate of the principle. "If I were given authority to formulate a measure that would provide the requisite elasticity to our present currency system," says Mr. Shaw, "I think I would add an amendment permitting National banks, with the consent of the Comptroller of the Currency, to issue a volume of circulating notes equal to fifty per cent of the bond-secured circulation, at a tax of six per cent, the same to be retired at will (by

Elastic medium equal to 50 per cent of collateral issues

the banks) or by direction of the Comptroller, by the deposit of an equal amount of lawful money, with any Sub-Treasury."

Predicting the result of such a measure in elasticity, Secretary Shaw continues: "Three things I know: First, this additional circulation would spring into existence almost instantly whenever and wherever interest rates advanced to the point of profit. Second, it would as promptly retire whenever interest rates became normal. Third, it would be absolutely safe, — as good as the present National bank-issue, and with a slight change, identical in form and appearance, — for the Government, amply protected by the six per cent tax, would underwrite it."

Government insurance to elastic medium

In this we have stated the principle of a current charge on "issues" for regulation of that part of the money medium which we would have respond to the fluctuating needs that could be met by ordinary dealings in the market. The charge, however, is to be in the nature of a premium paid for insurance. In this we have a partial abandonment of the principle of "banking on the capital-resources of the bank." The collaterally-secured note is still to serve as a part of the permanent money-supply, and the elastic medium is to gain its "soundness" from Government underwriting. In other words, Secretary Shaw, while announcing the principle of elasticity, still

Still clings to old idea of support to bond market

clings to the idea of bank-note issues for the support of the bond market, instead of limiting "issues" through banks to the fluctuating money needs of the country.

An Amendment of the Bank Act to Encourage Investment of Surplus Capital in "Gilt-Edge" Securities

To the above principles of emergency currency may be urged the objection that, from motives of business profit, the banks would very largely reduce their circulation, and reduce the holdings of United States bonds as a basis for issue. Thus, it may be said, such a change as that suggested for regulating issues, by interest requirement, or by means of any other current change adequate to compel retirement of issues, would defeat its own ends. To make effective a collaterally-secured emergency currency, some inducement must be offered to investment in the kind of capital-resources which will be received by the Government as a basis for issue. Such an inducement must be found in the rate of return which the bank may get on the kind of investments of surplus money or other capital-resources that may be reserved for hypothecation or sale to obtain money when needed.

The inducement to investment

Under the present Law investments of this kind are limited to (1) United States bonds, as a basis for

issue; (2) loans to (deposits with) reserve agents; and (3) more recently, to "gilt-edge" securities acceptable as a basis for Government loans. As to the first class of investment the banks get a return below two per cent. As to the second class, the rate of return is from two to three and one-half per cent; on the average they are somewhat above two per cent per annum. The most profitable return on "invested-reserves" is from those securities other than Government bonds and reserve deposits—"gilt-edge" securities such as have recently been received by the Secretary of the Treasury as collateral to "deposit" loans.

Investments under the present law

The business advantage of investment of surplus capital-resources in this class of securities, and the unquestioned soundness of the collateral, suggest the application of provisions similar to those advocated by Mr. Aldrich and Mr. Payne for the security of Government loans to the banks (Government deposits). In a bill introduced in the House of Representatives by Mr. Payne, February 26, 1903, it is proposed that the Secretary of the Treasury accept as collaterals the following securities: "Bonds of the United States, bonds or other interest-bearing obligations of any State of the United States, or any legally authorized bonds issued for municipal purposes by any city in the United States which has been in existence as a city for a period of twenty-five years, and which for a period of ten years previous to such

deposit has not defaulted in the payment of any part of either principal or interest of any debt authorized to be contracted by it, and which has at such date more than fifty thousand inhabitants as established by the last census, and whose net indebtedness does not exceed ten per centum of the valuation of the taxable property therein, to be ascertained by the last preceding valuation of property for the assessment of taxes; or the first-mortgage bonds, not including street railway bonds, of any railroad company which has paid dividends of not less than four per centum per annum regularly and continuously on its entire capital stock for a period of not less than ten years previous to the deposit of the bonds."

Amendment proposed by Mr. Aldrich and Mr. Payne

With the utmost safety the Treasurer as trustee for the note-holder and as guardian of the principle of "sound money" and "sound credit," might receive any of these investments as a basis for issues, thus giving to the banks a better return than they now receive on loans of surplus capital to reserve-agents. This would furnish the inducement to the banks to carry an "invested-reserve" that might be made immediately convertible. With such oppportunity given for investment of surplus money-reserves, and with the imposition of a tax which would insure that issues would not be put into circulation except when the money pressure was above the *ordinary*, both the inducement to invest and the convertibility of the

investment by sale or by hypothecation and issue would be secured.

Amendment of the Bank Act to Require Payment of Interest on Government "Deposit" Loans to Banks

The same reasoning as is urged in support of a charge on "issues" would suggest the imposition of an interest requirement on the banks for loans (deposits) from the United States Treasury. What has been so carefully called "a deposit" of the Government with a bank is not a deposit in any sense of the word. It is nothing more nor less than a *loan without interest*. *It is a sale of money* to the bank in return for which the Government gets a demand credit-claim against the bank secured by such collaterals as the Treasurer may require. These so-called deposits may be made immensely profitable to the bank; by using the money so purchased on credit and without interest, as a "money-reserve" the bank may purchase at least four times as much commercial paper "on-account" (*i.e.*, in exchange for deposits). For this reason, it is that only when pressure is brought to bear on the bank by the Government that the money is turned back into the Treasury, where it belongs.

The profitable character of these loans

Instead of the bank having an inducement to relieve its hypothecated investment from encumbrance as soon as the extraordinary demand for money is

past, there is a continuing inducement for the bank to stretch its credit to the limit at times when money-demands are small, and then again to appeal to the Government for aid in time of need. Another danger lies in the fact that the Government is not in touch with the commercial world except when appeals are made for assistance. It, therefore, knows not when to bring pressure for payment; the Government has only its surplus loaned and has no need to bring pressure at all until current public expenditures begin to run ahead of current revenues.

An inducement to encumber redemption equipment

For these several reasons, an interest charge, enough above the usual commercial rate, should be made, to compel the bank to do business on its own capital and to retain an unencumbered capital-surplus convertible by hypothecation with the Government when commercial-demands might make hypothecation profitable. This would make the Government surplus an emergency fund that would be sought for by the banks only in time of financial pressure — a fund which would return to the Government immediately after the emergency had passed. This would, to the extent of Government surplus available, avoid the necessity of importing gold when there is an adequate supply in the country to meet all monetary needs, and at the same time would give to the banks the advantage of being able to obtain money

Effect of an interest charge

on favorable terms when they have good capital-resources to hypothecate.

The Proposed Amendment for a Guarantee Fund to Secure Credit-Accounts

It has been stated, and, since the days of wild-cat banking, the statement has gone without challenge, that a commercial bank should not be allowed to commence, not to say continue, business until it had provided itself with property equipment sufficient to make both its "deposits" (credit-accounts) and its note-issues secure. A proper regard for the principle of elasticity requires a re-statement after the manner suggested by Mr. Cannon. A bank should have a capital equipment large enough to protect its credit, and to meet all commercial demands of its customers for money without calling in its loans.

Capital support to credit-accounts

If we accept this as a proper statement of the principle of capitalization and equipment, it follows that any security given to a bank's credit-accounts, or to its note-issues, should be provided out of the resources of the bank. The recent suggestion of Secretary Shaw, in the address above referred to, is to the effect that the amount received from the tax on issues (premiums for insurance of issues) should be utilized to guarantee the Government against loss from underwriting the emergency notes of the banks. In

Contrasted with Government underwriting

this the Secretary of the Treasury has not abandoned the idea of secured issues, but he would have the direct security come from the Government. Those who have declared themselves for secured issues would have bank-notes secured by the hypothecation of the capital-resources of the bank, while others, still more conservative, notable among them Mr. Dawes, would have the principle of security extended to the "deposits" of the banks as well as to the "issues."

The theory on which "security" or "insurance" of deposits rests, is this: that the credit-accounts (deposits) of the bank are the form of current funds most used in business; that the business of the community depends quite as much on the "soundness" of bank-credit as on the "soundness" of Government credit-money; that the profits of the bank are derived from buying income-producing commercial paper in exchange for bank-credit; the bank, therefore, should protect those who have taken its credit in exchange, so long as it remains outstanding for current use. In other words, the public is quite as much interested in "sound bank-credit" as it is in "sound money," and since the bank is permitted to issue "current credit-accounts" for its own profit it should be required to protect these with its own capital-resources. The theory is eminently sound in principle, and in practice would add much to the integrity of commercial bank-credit.

If we require the banks to deal on their own capital, the note-issues should be secured by bank assets. Again, if we are to have *a true system of assets banking*, then in so far as the security for current accounts of banks is not provided by original capitalization it should be derived from their capitalized current-income. An enforced contribution from income, in the form of interest payments on Government loans ("issues" and "deposits") in periods when the commercial rate is high, would not only operate to make elastic that part of our money system represented by note-issues and credit-accounts, but might also be used to build up a "fund" which would be held by the Government for the benefit of the bank's creditors. The security of "note-issues" and of "deposits," it is argued, would give to all forms of credit used as current funds in the community that element of security the lack of which has so often precipitated wholesale panic and individual disaster.

A trust fund to secure "deposits"

Such an insurance fund for "deposits," however, could not be built up and maintained on any other principle than that of "banking on capital-resources." The suggestion for an adequate guarantee fund for deposits is premised on an interest charge on secured issues, and on an interest charge on secured deposit-loans, so made and regulated as to make the capital-resources of the bank more readily convertible. The secured-note may enter into circulation without ques-

tion as to the soundness of our credit-money system; the guaranteed credit-account might be used in business to give the same implicit faith as to the soundness of our commercial-bank-credit. With such a modification in the Law, it is said, if the Law were properly administered, the banks would be compelled to do a safe business. The banks would be required to do business at an increased capital cost, it is true, but this would not necessarily mean an increased rate of interest to customers, nor decreased profits for the banks. As a result of increased capital strength and enlarged redemption equipment their credit would be more readily salable, and the banks might do a larger business than under a system which compels them to refrain from credit expansion when accommodation is most in demand. This would bring about that much desired condition so zealously advocated by Mr. Eckels, in which the Government would be entirely divorced from the banking business. All commercial-credit business would still be done by the banks; the banks would be operating on their own resources; and the Government when acting at all would serve in an auxiliary capacity only — that of trustee for all parties in interest and administrative guardian of the welfare of the nation.

The benefits of secured credit-accounts

Similar suggestion has come from several sources. The Fowler bill of 1897 contained a provision for a guarantee fund. The proposition has been argued

in financial journals. The opposition developed has come largely from the older and stronger banks. To them there is an advantage in the unsecured system in that their solvency is not questioned; and by virtue of their reputed ability to meet current obligations they are able to make large sales of credit compared with capital employed. To establish a common fund for the security of all credit-accounts sold by all the banks in the system would give to the small bank the same reputation for soundness as is enjoyed by the largest institutions. This argument would be valid under our present system of banking, wherein there is no check on credit sales other than a "money-reserve." If, however, an amendment were made which required a minimum cash-reserve to be provided out of capital, and the powers of the Comptroller were extended to prevent the extension of credit beyond a certain proportion of that capital available in the form of redemption equipment, neither the large nor the small bank could extend its credit beyond the prescribed limit. Each bank would be restricted in its maximum business to a safe proportion to capital invested. Under such a provision, the large bank could not be deprived of business by a small bank unless the small bank increased its capital, in which case the small bank would be entitled to do a larger business. It may be questioned whether any provision made for increased safety to business would

Character of opposition to securing "deposits"

reflect on the worthy institution. On the other hand, much may be gained by all parties concerned through the enlarged opportunities offered to banks for doing business. And through a system of mutual responsibility pressure would be brought by the banks themselves for an enforcement of the Law.

Whatever may be conceived as a proper application, in concrete provisions of the Law, the principles governing increased availability of capital-assets of National banks and increased elasticity by simple changes in the existing system may be summarized as follows:

(1) An amendment of the "money-reserve" provisions of the Bank Act, requiring a minimum "cash"-reserve to be provided out of capital, would operate to give increased financial strength to the banks; it would make possible increased elasticity of credit-accounts and credit-accommodations.

(2) A change in the Bank Act fixing a minimum of "redemption equipment" to be provided out of capital, making this proportionate to the maximum of credit-obligations outstanding, would operate to increase the capitalization of banks.

(3) An amendment requiring interest payments on "issues" (loaned by the Government to the banks) would operate to make the note-circulation an elastic currency.

(4) An amendment of the Bank Act permitting the hypothecation of "gilt-edge" securities for Gov-

ernment "deposits" would encourage capital investment in more highly convertible assets.

(5) An amendment requiring the payment of interest on "deposit" loans would make the Treasury surplus an important support to the banks for the support of increased credit-accommodation.

(6) The proposed amendment to constitute the Government income from interest on loans, taxation, etc., a contingent sinking fund has in it possibilities for increasing the soundness of bank-credit and for increasing elasticity in so far as elasticity depends on public confidence in the banking system.

(7) A provision requiring that all capital used for the purchase of "banking house," "real estate," for underwriting, etc., be considered banking capital impairment, would have a wholesome effect and would serve as a protection to the public.

(8) A clause requiring that all special and preferential deposits be stated in all published reports, would do much to correct present evils in banking practice.

Every measure taken to enable banks to meet demands for accommodation by use of capital equipment would tend to minimize fluctuation in demand, and to decrease the amount of capital which must be held in reserve in low income-producing investments and thus be to the advantage of the banks as well as of the business community.

Chapter XVII

THE SUPERIORITY OF THE AMERICAN FUNDING SYSTEM OVER THOSE OF OTHER COUNTRIES

A century of adaptation to new and ever-changing conditions has given to America some remarkable institutions. In none is the strenuous character of the people more strongly marked than in our financial system. In none have we developed greater possibilities for solidity and working efficiency than in our concerns organized to supply the increasing demand for current funds. Living amid great natural resources, hampered for lack of capital and industrial equipment, working in circumstances which require intensity of effort and strictest economy, the balance of National prosperity has been swung by two contending forces — the one conservative, the other promotive. Our conservatism has consisted in measures to protect property already acquired. Our promotions have been efforts to apply all our own resources, as well as those which might be acquired from others through contracts of current credit and of capitalization. An inventive people, we have exercised our best talent in devising ways and means for doing

Optimism and conservatism as factors in business

business, and to this end both capital and current funds have been obtained in exchange for contracts made for the future delivery of money. The result at times has been to carry investment judgment beyond all reasonable certainty of return.

Nor has the situation been an unnatural one. With teeming riches on every hand, awaiting only the intelligent application of capital for their recovery, when markets have been high the inducement to promotion and credit investment has been great. When failure has come, it has more often been due to changes in general market conditions than to disappointment in productive results. Prospective money returns have not always been realized within the term of a loan. Failure in judgment as to the amount of money obtainable in the future has resulted in inability to make money delivery — in inability to meet credit-obligations. Even when the rewards of nature have surpassed all calculation, money payments required by contracts of capitalization and current credit have not been met.

Failure to meet contracts for future delivery

As before suggested, the money returns required by contracts of credit have depended quite as much on the market price obtainable of the thing produced as on the amount of the physical product. The market has been subject to world conditions and to fluctuations which the parties to the contract could not foresee; so violently have these fluctuations in world

conditions reacted on our credit relations that periodically commerce and industry have become paralyzed by forced liquidations and the withdrawal of working funds. In each period of increased world activity and increasing financial return, capital has been more easily obtained from abroad; with each period of decreasing world demand and consequent lower prices for products, capital has become more conservative, forcing retrenchment and financial readjustment. Out of such a situation — alternately moved by the forces of conservatism (or protection to wealth acquired) and by forces of promotion and credit expansion (or endeavor for increasing gains) — our funding institutions have arisen.

Failures due to world market conditions

In the organization and control of institutions of current credit, the guiding principle of the American people has ever been and to-day is to give to capital the highest utility compatible with safety. Proceeding from this principle, alternating in control between the forces of conservatism and those of credit expansion, we have developed a National system that is unique — a system in which both our money and our commercial funds are on a credit basis. In the interest of National economy and business safety, our money (largely credit-money) is issued by an agency of Federal Government — the United States Treasury. For purposes of utility, our commercial-credit is issued and controlled by private

locally-independent institutions — our commercial banks. The more vividly to portray our National funding system, it has been described as a mammoth structure of delicate balance and adjustment resting on two independent and widely separated columns or pillars: the one is a column of \$1,500,000,000 of credit-money, which has for its foundation the gold Treasury-reserves; the other is a column or pillar of about \$10,000,000,000 of bank-credit, which has for its foundation the reserves of the commercial bank. On these two columns or pillars is superimposed from \$30,000,000,000 to \$60,000,000,000 of business-credit that looks to the resources of the two independent and widely separated institutions above referred to — the Treasury and the bank — for support. The great problem of the century past has been to make this structure a safe one in which to do business. The problem of to-day is to so lay the foundations that the columns may be able to support the constantly shifting strain that is placed upon them.

The principles of safety and economy in our financial system

In planning for the present as well as for the future we must plan for the business of a continent. Our business demands are larger and more varied than those of any other country. Our plans, therefore, must be continental. We cannot confine our view to one State, as does France, or Spain, or Austria. We already have developed a banking power comparable

The abandonment of the European system

with that of all Europe. From considerations of local autonomy and National development we have long since abandoned the European system, the central feature of which is a State bank under Government direction and control.

That the Treasury, under such a system as we have, cannot supply the people with current funds goes without saying. Even the money-demands of commerce and industry cannot be supplied except through loans, and the Government has permanently retired from the loan business. Loaning is the only method by which the fluctuating demand for funds may be met under any system of finance. In Germany, in Russia, and in France — in fact wherever the general government is also a banker — these loans may be made to the people direct. But under a system such as ours, in which the Government has no institution of commercial-credit, the only manner in which the Government can bring its large financial resources to the support of the market is through independently organized commercial banks.

The relation of the Treasury to the money market

How under Our System the Treasury and the Commercial Bank may Work together to Provide the Elasticity Required

Since both money-demands and credit-demands fall immediately on the commercial bank it is to this that we must look for the means necessary to supply

these demands. Our inquiry is, therefore, Under such a system as that with which we are working, how may the banks the better supply the fluctuating money and credit-demands, and how may the Treasury best lend support to the banks without weakening its support to the credit-money-issues of the Government? Answer to this inquiry has come from some of our leading bankers in the following form: "That the Treasury be required to deposit all its current funds over and above its currency requirements in the banks." The reason urged in support of this proposition is that such a requirement would "prevent the money of the country being locked up in the public vaults, thus depriving business of its proper use."

Proposed method of Treasury support

In opposition it is said that the reasoning by which the above conclusion is reached proceeds from two fallacies: first, that the money held by the Treasury is abstracted from the money stock of the country, and, therefore, operates to cripple business, and, second, that greater elasticity would be given to bank-credit by having the resources of the Government deposited in commercial banks.

Objections raised

The popular notion that money in the vaults of the Government is abstracted from the money stock "of the country" has already been discussed. There can be no reasonable conclusion other than that the supply of money for business purposes finds its level

through the market, and that whatever is regularly held in reserve by any particular government is not abstracted from the money-supply of a particular country, but goes rather to reduce the available money stock of the world, which may be made available for private business ends. If, therefore, the Treasury surplus of the United States may be made available for private business uses in time of extraordinary business demand, such Treasury-reserve instead of decreasing the money stock of the country will increase it to the full extent of the amount thus made available. Furthermore, it may be said that the money in the vaults of the Treasury is not idle. On the contrary, in so far as it is needed to support the credit-issues of the Government, it gives to the country from eight to ten times the amount of money which is held in reserve for the support of these credit-issues. The Treasury-reserves, therefore, enable the Government to supply to the people from eight to ten times as much money as it could do at the same cost if these reserves were not so held.

Treasury stock not withdrawn from national money supply

Again, in so far as the general fund of the Treasury is not necessary to the support of credit-issues of Government they must be looked to as current cash for the carrying on of a public institution. To say that public business is not a part of the business of the country would certainly be erroneous. The actual need of the Government for current funds

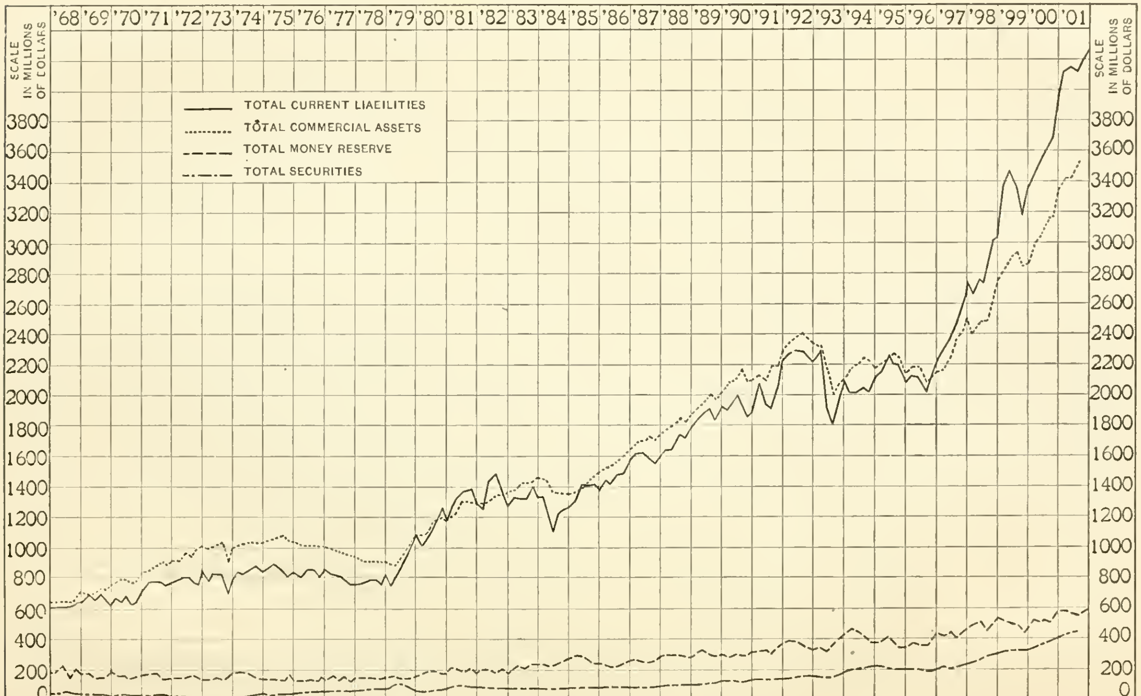
with which to carry on its business has been variously estimated at from $100,000,000 to $200,000,000. To the extent that the amount held in the Treasury is not to supply an actual funding need this surplus should be reduced — but not by loaning it to private parties. The Government has obligations of its own to meet, and may at any time apply a surplus to their reduction. If at any time there may be said to be any idle money in the Treasury this is not a fault of the system, but rather a fault of those who are operating it. But the mere fact of the segregation of public funds from private funds leaves the Government at all times in a position to lend temporary aid to private funding institutions, which it could not do if the public funds had been commingled with those of private agencies.

Treasury-reserves may increase nation's money supply

The second fallacy is quite as apparent. To make the commercial bank the regular recipient or depository of Government funds as they are received, when the Government itself is out of the banking business, cannnot add to the elasticity of bank-credit. If Government-deposits with the banks were to be kept at a uniform amount, this amount would soon become absorbed in business, and the bank-reserves would be reduced to the usual safe working proportion. Whenever an extraordinary demand for money or for current funds might arise the bank would be in no better position

Government deposits in banks do not increase elasticity

XIII. CHART SHOWING MONEY-RESERVE, SECURITIES HELD, OUTSTANDING CREDIT ACCOUNTS AND COMMERCIAL ASSETS OF NATIONAL BANKS



than before to meet this demand. This is an assumption most favorable to such a reciprocal arrangement.

The revenues and expenditures of Government are not uniform. Were the revenue receipts and current expense payments to be made through the banks this would be added cause of monetary and credit disturbance, since it often happens that the banks are hardest pressed and are required to keep the largest reserves for their own protection at a time when the expenses of the Government are in excess of revenues and the Treasury surplus is running low. If, for example, the banks had been the fiscal agents of the Government within the year 1903–4, it would have been necessary for them not only to have paid for the Panama canal purchase and to have arranged for the other extraordinary fiscal payments, but they would also have been required to meet a revenue deficit of $41,700,000. That is, all of these causes would have operated to reduce the Government surplus, and the Treasury must have drawn heavily on the banks as a means of protecting its own credit-obligations. Had these drafts been postponed, the Government, with a large surplus, would have been forced to borrow money to fund its current needs. To place the Government in a position of this kind would hamper public business without adding anything to the strength of the banks. Such an alliance between the Government and the banks would reduce their

May increase monetary disturbances

ability to extend commercial accommodation and would stand in the way of, rather than permit, increased elasticity in the system.

The Independent Treasury Increases the National Money Supply

So long as the Government remains out of the banking business (and with us this seems to be an established policy), the greatest elasticity obtainable must come through the collateral support which an Independent Treasury is able to give to independent commercial banks. The fact that the National Treasury carries in its vaults from $100,000,000 to $250,000,000 in money over and above its currency requirements, and that this may be kept free for collateral support to the banks, suggests the basis on which the Government may aid the banks to meet increased money-demands and at the same time permit the banks to increase their credit-accounts to customers. It usually happens that the Treasury surplus becomes largest in periods of low money-demand — at times when the banks are giving an inordinate expansion to their credit. For example, from June 30, 1899, to June 30, 1902, the ordinary receipts of the Treasury exceeded the ordinary disbursements by $345,000,000. During the same period the bank-credit of the country expanded about $2,000,000,000. From June 30, 1902, to June 30, 1904, the

Causes money to be stored during periods of low demand

ordinary receipts of the Treasury exceeded the ordinary expenditures only $12,000,000, and during the latter fiscal year there was an actual deficit of $41,-700,000. This falling off of Government revenues was coincident with great financial pressure on the banks, and a consequent reduction in credit-accommodations to the public.

Treasury-reserves released in high money-demand

The net results of the Independent Treasury system during the years referred to have been to bring into the United States in time of greatest prosperity, and to keep here during a period of credit expansion, at least $200,000,000 in gold, which if placed in the vaults of banks would doubtless have caused still greater credit expansion on the one hand, and at the same time would have set up an exportation of gold. Even if no financial aid had been given to the banks by the Treasury, the result of the independent fiscal system would have been beneficial. During the period of low money-demand the Treasury was gradually absorbing an increasing surplus, thus preventing exportation of gold, while during the period of extraordinary money-demand the Government was gradually disbursing the surplus to meet its own revenue deficit. The same effect may be traced through the recurring periods of credit expansion and credit retraction since the Independent Treasury was established.

Collateral Aid of the Treasury to Prevent Credit Contraction

But the history of the last three years (1902, 1903, and 1904) teaches another lesson, which by the banks should never be forgotten. When the effects of speculative loans had brought about credit reaction, and business conservatives began to demand settlement on contracts for money delivery, and when increased pressure was brought on the banks for money payment, the rapidly disappearing reserves would doubtless have proved ruinous, not only to the banks but also to the commercial and industrial interests of the whole nation through the collapse of the bank-credit column supporting them, had not the National Treasury responded to pleas for aid from commercial-credit institutions. A volume of credit had been piled up which was too great for the banks to support on their own resources. The crumbling foundation of bankers' reserves would doubtless have gone from under and given way to the financial stress which business interests were bringing to bear on them had not the Government transferred over $100,000,000 to their support. Had the prescription above referred to as a remedy for inelasticity and for financial weakness been followed, had the Government previously deposited its surplus in the banks during these years of so-called prosperity, instead of giving to the great

May support the banks in time of stress

National credit structure the solidity and the power of endurance which is bespoken for it, it would have had the effect of adding nothing to the capital strength of our commercial-credit institutions; it would have made the superstructure still more top-heavy — would have placed our funding system in the same position as were those of Germany, Russia, England, and France. That our business suffered less than the commerce and industry of Europe during the same period was largely due to the very subsidiary reserves of which certain individuals are heard to complain.

The Independent Treasury gives to the American system a strength that is not attainable under any of the much lauded foreign financial devices. The fact is that we have not used the Independent Treasury to its highest advantage. The deposits made by the Government with banks are loans without interest. So long as the Government does not call these loans there is no inducement for the banks to pay them. On three different occasions from 1899 to 1903 the Treasury has helped the banks to support their financial burdens. In each case the strain upon them was due to an over-issue of their own credit and to inability to make the money payments demanded without a violent contraction in credit-accommodation. The Government has stepped in to prevent this contraction. But when the stress was past, what

Some recent experiences

then? Did the Government again gradually repossess itself of the moneys gratuitously loaned? Has it again reclaimed the means by which assistance was rendered? No; following just such reasoning as has been quoted, the loans remained with the banks still without interest. The Treasury was able again and again to come to the relief of the banks by reason only of its constantly increasing surplus.

Weakness in present practices

The weakness in the situation lies in the failure of the banks to reduce their temporary loans from the Government when the emergency is past, and in the Treasury's failing to call in its demand loans when the reserves of the banks become adequate to support their credit. In July and August the bank reserves piled up till they were becoming a source of possible weakness. When the Panama canal purchase was to be settled for, when the Government revenues began to fall off, instead of demanding a return of loans to the banks and thus reducing the large surplus-reserves which the banks had accumulated, the Government preferred to still further reduce the reserves in its vaults, calling on the banks for only such an amount as seemed necessary. During the month of September there was a gradual withdrawal of bank reserves to supply the business need. Under circumstances of weakening bank reserves and of gradually decreasing revenue of Government, with the consequent disappearing of the Treasury surplus,

the banks may not only be deprived of collateral aid in time of financial stress, but may be required even to still further weaken their money-reserves by making payments to the Government. Under such circumstances, the banks would be left to their own resources, with the Government money-demand as well as the public money-demand to supply. The result would be that in their own protection the banks would be forced to contract business accommodation in such a way as to make the present practice positively dangerous.

How the Treasury Surplus may be kept as a Reserve for Collateral Support to Credit

At no time in the history of banking were the time and circumstances more opportune for Treasury support to banks than in 1902 and 1903. At no time in our history might the Secretary more wisely have withdrawn the Government deposits than in July and August, 1904, when the money-reserves were piled up in the vaults of the banks. The effect of failure to do this was twofold: (1) The cheapness of money caused an exportation of gold; (2) the low rate of call-loans encouraged speculation. In September we had the result made apparent of a concurrent flow of money to the interior and abroad, and at the same time an increase in speculative activity which went on unabated till about December first. Thus again

Interest charges to insure prompt payment of loans

we had a brief period of increasing credit expansion and decreasing bank-reserves. These movements did not prove threatening, it is true, but there seems at least a possibility that the banks may again call to the Treasury for collateral aid, and under conditions which would require the Treasury to turn a deaf ear. Following a practice by which the Government loans its surplus to the banks without interest or below the ordinary market rate, the continuous aid of the Treasury to the banks may depend on the exercise of discretion by the Secretary. If, however, the Government were to charge the bank, not an exorbitant rate, as would a money-lender in time of stress, but the usual commercial rate, the bank would promptly return the loan when money falls below the usual price. In either case, whether by exercise of official discretion or by charging a rate which would make the restoration of reserves autonomous, the Treasury support to the system would not be weakened.

Elastic Possibilities in the Bank-Note

It has been pointed out that even if the Treasury never had a surplus to loan to the banks in periods of emergency, under the American system we have possibilities for increasing circulation for current needs that are not inherent in foreign systems. This is in the so-called issues of banks. If the bank has unencumbered resources (mind you, *un*encumbered resources) necessary to obtain a Government "de-

posit" (loan), these same resources may be pledged for issue—a loan from the Government in the form of "bank-notes." July 1, 1904, the Treasury reported that there were $449,000,000 of bank-notes in the hands of the banks or in circulation. These issues alone were more than ample to meet all fluctuations in money-demands of the country. The only trouble is (as in the case of a permanent policy of depositing Government surplus with the banks) that when the banks are in trouble these notes are not available. Like the Government deposits, they have already been absorbed in current circulation, have all been used to support the ordinary banking operations during periods of low money-demand, and in time of strain the banks have their best securities tied up for funds with which to do business when there is no strain to be met. In time of extraordinary demand they are left helpless.

Equal to fluctuating money-demands

Why should this be so? Why might not these notes be used in such a way as to permit an increase of at least $400,000,000 in money circulation and a simultaneous increase of at least $1,600,000,000 of bank-credit-accounts at any time that an extraordinary demand for funds might be made. Many bankers have suggested as a way out of the difficulty that a tax be placed on issues. Secretary Shaw in his Chicago address of a year ago pointed to this. Re-

May be made to respond to demands

quire the banks to pay a tax equal to the commercial rate of interest (let us say five or six per cent) on all issues over and above a determined minimum — or call it interest on the "issue loan" of the Government to the banks — and the banks would not encumber their assets except when money-demands were above that rate. These suggestions are made with much force. The result may also be predicated on experience. As the trustee of collaterals and as the department of issue and control of the bank-note, the Treasury might thus lend as much support for the expansion of money circulation and current credit accommodation as the system itself would require.

The effects of a law requiring interest on "deposits" and "issues"

Aside from making the bank-note circulation in large part an emergency currency, aside from giving elasticity to our National money and credit system, the effect of such a Law would be twofold. By taking a large part of the present issue of bank-notes out of circulation, except when an *extraordinary* demand arose, the *ordinary* demand must be supplied by other forms of money — the amount taken out of *ordinary* circulation must come from some other source. This would necessitate an increase in gold certificates or other forms of money-issue. The ordinary money requirement would be met, but it would not be met by bank-notes. The necessary money-funds would come either from an increase in issues of Government or from importation of gold.

The second result that would obtain has a bearing on the financial strength of the banks themselves. If the banks were not encouraged to encumber their best resources in time of low money-demand; if, it may be said, they were required to retain their capital in such form as to make it available for support of their credit and were permitted to deposit "gilt-edge" securities of such kind and quality as might be prescribed by the Treasurer for bank-notes in time of strain, the support which is now given to the credit of Government in the form of increased strength to the bond market would then be given to the banking business. In other words, the net result would be an increase of banking-capital for banking purposes and an increase in standard money in the country — a result which in itself would be desirable as a means of supporting greater elasticity in credit-accommodation.

Support which the Treasury may give to the Money Market

Another conservative principle is contained in the American system that is not afforded by that of any other country: As the one institution permitted to issue credit-money the Treasury gives to the people a form of currency more convenient in use than gold, and less expensive to itself. The silver dollar, the greenback, the silver certificate, etc., cost the people who use them just as much as gold coin or gold

certificates, but the cost to the Government of these credit-moneys is less. By means of their issue the Government is able to carry on its own business and to decrease its interest-bearing debt about $600,000,000.

Financial advantage of credit-money-issues

What the Treasury stands pledged to do and what it is necessary for it to do under our system is to protect these credit-issues, *i.e.*, to make payment in gold when gold is demanded. So long as no doubt arises as to this there can be no financial disturbance on that account. But there may be a distinct advantage to the money and credit system. If at any time our foreign balances demanding settlement become so great as to cause a drain on bankers' gold reserves (the foundation for some $10,000,000,000 of bank-credit), it may become necessary to stay the tide of exportation as a means of protecting the National credit structure. This result will be effected through the demands made by the banks on the United States Treasury for payment of Government credit-issues. That is, through their own reserves the banks may reach the gold reserves of the Treasury and bring them to their own support. Under such circumstances and at such time the Government will be brought into the gold market as a means of meeting its own demand debt, and gold may be had for the support of the credit of American Funding Institutions at a rate more favorable than it could be had by any individual, private banking corporation, or foreign nation.

No greater fallacy was ever put forth than that which concludes that a Government which is not in the banking or loan business can supply money capital direct for private business. If all the gold coin of the world were stamped and issued from the United States mint, so long as the business habits of our people remained the same, no greater amount of gold would find its way into American channels of trade. On the other hand, if the Government did not issue or coin a dollar the people would have the same amount of money which they now have with which to do business. Our circulation would not increase or decrease in either case. Instead of buying gold and taking it to the mint we might buy foreign coins; instead of retaining the currency issued by the Government or that put out in payment of its own obligations we might have some other form of currency. But the usual amount of currency would be supplied from one source or another by coinage, by issue or by importation, in exchange for products of our mines, our manufactures, etc. What the Government can do and does do is to make the moneys ordinarily needed and currently used conform to a National standard, and to protect these in their

Superiority of American system in elastic possibilities

financial and physical integrity against impairment. More than this, the Government may provide a means by which extraordinary demands for money may be met without resort to importation. It may make pro-

vision for meeting this fluctuating demand through the banks, and it may make this extraordinary money-supply more readily obtainable than might be if our traders and manufacturers were required to go abroad for it. This may be done either by direct money loans to the banks from the Treasury reserves, or by temporary credit-issues to the banks. Instead of the banks pledging securities abroad, the way should be opened to pledge them with the Treasury and thereby obtain any amount of money for such extraordinary circulation that is needed without disturbing domestic and foreign trade. And for this purpose no system is so well adapted as the American system, having for its main support the two independent financial institutions — the independent commercial bank and the Independent Treasury, the one representing the financial resources of fifteen thousand independent banking institutions, the other representing the combined resources of the nation.

CHAPTER XVIII

RECENT EFFORTS MADE TO FURTHER ADAPT OUR FUNDING SYSTEM TO THE NATION'S BUSINESS NEEDS

Among the results already accomplished in the effort to adapt our funding system to the nation's business needs, prominently stand out the following: (1) *The abandonment of the European funding system.* This was effected through the refusal of the Federal Congress to incorporate the third bank of the United States, and by the contemporaneous withdrawal of the several States from commercial banking enterprises. (2) *The establishment of independently capitalized commercial banks* in each locality whose private funding needs and resources were sufficient to induce capital to interest itself in this form of undertaking. (3) *The establishment of an Independent Federal Treasury* — a department of Government which provides the means necessary for meeting public fiscal obligations without drawing on private capital and without disturbance to local business. (4) *The Legal Tender Acts, and the several Currency Acts, and National Bank Act* — which not only completely segregated the functions of money coinage and money-issue

Adaptations already made to American conditions

from those of banking, but also collected into a national system the best experience of a quarter of a century of independent banking. (5) *The gold standard currency Act of* 1900 — which made certain all question as to the standard of money valuation and of credit-money payment — which enjoined the Treasurer to maintain all the money-issues of the Government at a valuation equal to the prescribed standard — and which adequately capitalized the ability of the Division of Issue and Redemption of the Treasury to redeem all credit-money obligations (1) through placing in the hands of the Treasurer an adequate gold fund to be protected as a "reserve," (2) by giving to this fund a first lien on the "general fund" of the revenue department of the Treasury, and (3) by arming the Secretary with the full loan power of the national Government, as a means of ultimate redemption of credit-money-issues.

These results are accomplished facts. The credit-money-issues of the Treasury are "sound." They pass without question in any part of the world at par with gold coin of the United States. American National banks, as independent institutions likewise, are as "sound" as those of any other country.

The need which has not been successfully met

Neither has our banking system as a whole, and our business, suffered more from "inelasticity" of current-funds than have the older nations of Europe. Still, our funding system is admittedly far from being satisfac-

tory; there yet remains a condition present which we cannot fail to recognize as a subject of serious concern — viz., that our own funding system (as well as theirs) has not satisfactorily met the shifting and fluctuating demands of trade, and that business has suffered much on this account. This is the subject of present solicitation and of many prospective measures of reform, a critical review of which is presented.

Before undertaking a critical review, however, some definite standard of analytical and critical judgment must be found. This standard is taken from two fundamental conclusions which would seem to be well established in American thought: (1) That an institution, public or private, which is authorized to issue credit-money should be capitalized sufficiently to enable it to maintain adequate reserves with which to redeem these credit-issues in the standard money of the realm, at par, on demand. (2) That a commercial bank which is not supported by the Government should be required to do business on its own capital. That is to say, that an institution which is authorized by charter to circulate its own credit-accounts in the community for current funds should have a capital sufficient to make it a safe institution with which to do business; and that the capital should be guarded as a special fund to maintain "reserves" with which to meet current demands for payment on these credit-obligations without

Standards of judgment of measures proposed

forcing commercial credit contraction by liquidation and without endangering public welfare.

Accepting these general conclusions as principles fundamental to "sound currency" and "sound banking," several other conclusions would seem warranted:

I. That so long as we retain the gold standard of valuation and of credit redemption, all issues of the Treasury (including silver coins and silver certificates, as well as currency obligations) should be interchangeable and should be recognized as promises of the Government to pay gold on demand. It being made the duty of the Treasurer to maintain all issues at par, the "gold reserve" in the Division of Issue and Redemption, the lien on the "general fund" of the Treasury given to this division, and the loan power in the hands of the Treasurer for reimbursement of the gold reserve thus created, should be placed behind the silver coins and silver certificates of the United States as well as behind the greenbacks and the Treasury notes of 1890. The duty of the Treasurer with respect to the prompt redemption of these issues should not be left subject to doubt through failure to make specific mention of them for a guide to official conduct.

II. In passing judgment on measures proposed to increase the "soundness" of commercial credit-funds issued by banks (bank accounts) the following principles of capitalization should be recognized: (1)

That no resources of a commercial bank should be regarded as "unimpaired capital" which are not proper capital investments and which may not be available as a fund to supply the bank with "cash" to redeem its outstanding credit. (2) That the amount of capital which is to be considered as available (or unimpaired) for the support of credit-accounts should be specifically "reserved" for that purpose and protected as a "reserve fund," and should not be allowed to become encumbered or to be so used as not to be at all times accessible for the redemption of demand credit-obligations. (3) That all funds which are to be considered as "reserves" for redemption of current credit-obligations should be *capital funds*, and the accounts kept and reports published of "reserve funds" should not include money or other assets borrowed from customers — *i.e.*, obtained in exchange for credit liabilities. (4) That banks should never be permitted to extend credit (sell an amount of credit-accounts to customers) which is not adequately protected by such *capital reservations; i.e.*, a limit of safety should be placed on the amount of credit-obligations which a bank may issue proportionate to "unimpaired capital." (5) That when any portion of the capital of a bank shall be lost, or encumbered, or in any manner rendered unavailable (as in the purchase of real-estate or in underwriting), that the limit of credit

Sound banking conclusions

issue permissible to such bank should be reduced in proportion to the amount so rendered unavailable for current redemption purposes. (6) That if branch-banking be authorized, the amount or proportion of unencumbered capital "reserves" should be the same as those required of individual banks.

III. Government issued currency, and privately issued commercial-credit funds, having been rendered "sound" by the Treasury and the bank each adequately capitalizing its redemption needs, "elasticity" in such a funding system as ours would require: (1) That, since the Treasury cannot supply directly to the people the funds required in business to meet the fluctuations in money-demand as well as in commercial credit-demands, these funds must be supplied by commercial banks. (2) That, since the banks are organized and capitalized to supply current credit-accounts to the public at a profit, and the chief fluctuations in money-demands are bankers' demands to keep up the money-reserves drawn against by those holding current accounts, the unimpaired capital of banks should be sufficient to procure this extraordinary money-supply when needed. (3) That the *surplus* capital reserves of banks, kept for the purpose of expanding the money-supply, either as a means of supporting credit-accounts or of expanding credit-accommodations, should be invested in such securities or other assets as are readily convertible

Conclusions with respect to elasticity

and such as will be received by the Treasury as collateral for money loans to the banks. (4) That these Treasury loans, whether in the form of gold ("deposits") or credit-money ("issues") should bear a rate of interest which will cause the banks to retire from circulation the extraordinary money-supply when not needed — *i.e.*, when customers reduce the extraordinary amount of credit-accommodations extended to them by the banks.

Measures discussed

With the foregoing canons of critical judgment before us, the following proposed measures will be discussed in the order set out: (1) The Baltimore Plan; (2) the Carlisle Plan; (3) the Fowler Bill of 1897; (4) the plan of the Monetary Commission of the Indianapolis Convention, 1898; (5) the McCleary Bill of 1898; (6) the Gage Bill of 1900; (7) the Currency Act of 1900; (8) the Fowler Bills of 1902 and 1903; and (9) the Payne Bill of 1903. In taking them up for detailed discussion, it should be held in mind that at the time the Baltimore Plan was proposed, conflicting legislation had brought the Treasury into financial disrepute and shaken confidence in its credit-issues. The Currency Law of 1873 had established the gold standard and had made it the duty of the Treasurer to maintain all issues at par, but the only means placed in the hands of the Treasury to do this was the gold-reserve fund ($100,000,000 for redemption of United States notes

created by the Resumption Act of 1878) and the loan power given to the Secretary. Notwithstanding this and the fall in the price of silver, measure after measure by Congress was made law which forced into circulation such volumes of silver and silver obligations as to render impossible the maintenance of parity of money-issues by means of the fund at the Treasurer's disposal. The results were a violent shock to national credit, Government borrowing to support an inadequate reserve, and the sound money campaign.

The Baltimore Plan

Just emerging from this situation the Baltimore Plan (a proposition made by a committee of bankers to the American Bankers' Association meeting at Baltimore in October, 1897) became a subject of general interest. Though primarily intended as a currency measure, the plan proposed also bears a close relation to the bank, since the Treasury problem was to be solved by placing its burdens on the bank. Currency was to be furnished to the country by permitting the banks to issue to the extent of seventy-five per cent of their capital. No bond deposits with the Treasury were to be required, (1) because the National debt was fast being paid, and (2) because it was thought the currency could just as well be secured and the fluctuating demands could better be met without such a provision. To make

the bank currency "sound," current redemptions were to be made through the Treasury out of a five per cent "redemption fund" as at present. Ultimate redemption was to be provided for by the creation of a common "guarantee fund" equal to five per cent of the total circulation, and by making the issues of each bank a first lien on its assets. This would have met every requirement as to soundness, since so long as the bank remained solvent the redemptions would currently be met out of the "redemption fund," and as soon as the bank became insolvent the very cause of its insolvency (credit expansion) would add strength to the notes; that is, the greater the credit liabilities incurred by the bank the greater would be the amount of the assets acquired on which the note-holders would have a first lien.

A sound currency provided for

In the event of the adoption of this plan, therefore, sound currency would have been obtained through decreased banking strength. The capital of institutions created for the purpose of supplying sound commercial credit-accounts to the community would have been impaired by using it to capitalize the credit currency issues—to do for the credit-money circulation what the Treasury had failed to do. By placing their resources back of the money circulation their banking capital would have been encumbered and to that extent rendered unavailable for support

Sound currency at the expense of banking strength

of credit-accounts — the true banking purpose. This impairment would have resulted in two ways: (1) By permitting the banks to issue notes equal to seventy-five per cent of their capital and to use these notes for money, their current money needs would have been met by their own obligations to deliver legal-tender or standard money in the future — thus encouraging low capitalization; (2) by making these note-issues a first lien on commercial assets and requiring no deposit or specific reservation of capital assets for their ultimate redemption, the capital assets to be used for banking support as well as the commercial assets for the final redemption of outstanding accounts would be reduced without making this fact apparent to the public.

Provisions for elasticity

Provision was made for elasticity in money-supply by permitting the banks to issue notes equal in amount to fifty per cent of their capital at a nominal tax (one-half of one per cent per annum), and for issues above this amount subject to a tax heavy enough to compel retirement except when money rates were high. This was a true principle for an "emergency circulation," and the amount provided would have been adequate to supply all ordinary money-demands. But if at any time an extraordinary demand were made for standard money this emergency currency would have been an added cause for the contraction of credit-accommodations. In other words, while

the method proposed provided for an increase in credit-money circulation to meet the bank's fluctuating money-demands, it did not provide for an expanding standard money base of credit expansion; it did not provide for "elasticity" in the very sort of funds in which greatest elasticity is required — credit-accounts. As a banking measure it was weak, both from the point of view of "soundness" and of "elasticity."

The Carlisle Plan

Under similar circumstances Mr. Carlisle (then Secretary of the Treasury) suggested a measure of relief. Like the Baltimore Plan, this was also intended to solve the sound money problem. Again the Government issues were to be strengthened by shifting the credit-money load from the Treasury reserves and placing it on the banking reserves. Instead of increasing the capital support of the Treasury for meeting its own current monetary obligations, as was finally done in the Currency Law of 1900, the credit issues of the Government were to be supplanted by credit-issues of the banks. Not only were the National banks to be permitted to issue notes to the amount of seventy-five per cent of their capital and surplus, but under like conditions the State banks and institutions were to be given the same issue privileges.

The primary purpose of the measure

As a money measure this one was also, in principle, eminently "sound." Current redemptions were to be made by the banks and through such agencies as were to be officially designated. Security for ultimate redemption of issues was to be provided by a deposit of Treasury issues equal to thirty per cent of the amount of circulation taken out; a common guarantee fund was also set up similar to that contained in the Baltimore Plan, and the notes were to be a first lien on all assets and on the contingent stockholders' liability of the individual bank issuing them. The notes, therefore, had all the security that might be desired.

Sound money provisions

As a banking measure, all that has been said concerning the Baltimore Plan may be urged with reference to this, except that the banking capital would not be so seriously impaired. A bank must capitalize thirty per cent of its note-issues before obtaining them, but the remaining seventy per cent of notes outstanding were an encumbrance on the capital intended for commercial-credit support. The banks were to assume these public money burdens, which with a $100,000,000 gold-reserve the Treasury had been unable to bear up under, and without making any provision for an increase in capital. The anomalous position was again taken that what had proved a burden on the Treasury would not prove a burden

Unsoundness of the plan as a bank measure

to the banks. The credit-accounts of the banks were to be sacrificed as a means of giving financial strength to the money circulation. If adopted, the measure would have crippled the banks for performing the commercial-credit functions for which they are created.

No provision for elasticity

In the Carlisle Plan no provision was made for an elastic money medium. Every inducement was offered the banks to force out notes and to make them the permanent money stock of the community. If they failed to keep out all their notes it would be only because the country could not use as much money as they were authorized to put out, and in case the full amount were absorbed, then no provision was made for an increase. But even if they did not succeed in keeping out the full amount of the authorized issue and an extraordinary demand were made for gold or legal-tender issues of Government, then the volume of bank-notes outstanding would force a contraction of credit-accounts as a means of obtaining a supply of legal-tender Government issues for banking reserves. Any extraordinary money-demand would therefore increase the weakness of the credit-accounts of the banks and would cause still more violent credit reactions.

The Fowler Bill of 1897

Like the Carlisle Plan, the Fowler Bill of 1897 was intended to relieve the Treasury as well as amend the

Bank Act. As a currency measure it proposed to supplant completely the credit-issues of the Treasury. This was to be accomplished by requiring all banks availing themselves of the issue-privilege to purchase and surrender to the Treasury for cancellation, legal-tender notes, Treasury notes of 1890, and gold certificates equal to their "legal reserve" requirements, and to receive in return an equal amount of gold and silver coins. This would have taken care of the Treasury issues by forcing the Government to pay them. The ordinary money requirements for general circulation were to be supplanted by bank-notes secured by bonds ($700,000,000). Besides the gold and silver banking-reserves, and the bank-notes for general circulation, an "emergency currency" in the form of bank-notes was provided for equal to the combined capital and surplus of banks availing themselves of the issue-privilege. This emergency currency was to be taxed at a graduated rate from one to ten per cent, the tax ranging from six to ten per cent after the amount of issues reached sixty per cent of capitalization. As the average rate of taxation below this amount was only two and one-third per cent, it is to be presumed that at least sixty per cent of the "emergency currency" might have been used to supply ordinary money-demands, only the amount above sixty per cent being intended for retirement after the extraordinary money-demands had passed.

The general plan

Considering the question of "soundness" the Treasury issues were practically to be eliminated by payment. The bank-notes were to be partly secured by bonds, and the remainder were secured by a first lien on assets and a first claim against stockholders. Besides, a common guarantee fund was to be created by the several forms of tax levies, which fund was to be used (1) to redeem the bond-secured notes, and (2) for the redemption of emergency notes. This fund was to take the place of the bonds as they were gradually retired. Provision was also made for securing the current bank liabilities through the creation of an insurance fund of five per cent of the average deposits. The customer was to be further protected by closer supervision and control. Branch-banking was to be permitted under conditions which gave the public the same protection as with individual banks.

Sound currency and sound banking provisions

Had the measure become a law and been enforced on all of the banks, State as well as National, the Treasury would have been completely relieved from its credit-money obligations, a sound credit-money would have been provided, the banking reserve requirements would have restricted the credit-money-issues to the amount demanded for general circulation, the banks would have been forced to increase their initial capital, and an increasing capital surplus

Defects in the bill

would have been accumulating as a guarantee fund for note redemptions. Furthermore, the competition between the banks would have forced them to insure their accounts, thus again increasing the capital surplus for the protection of holders of credit-accounts, and the interest of the stronger banks in a common insurance fund would have forced a rigid inspection and official control of the affairs of the less provident. To meet these requirements the relative capitalization of banks for redemption of notes and credit-accounts must have at least doubled. But the law had two weaknesses: (1) That its acceptance by National banks was made optional; (2) the capital requirements were so great that if made compulsory it would have driven all National banks out of business in competition with State banks. Such a law could never have been made effective unless State and private, as well as National banking institutions — all concerns permitted to do a banking business — had been required to adopt its provisions or as a penalty for non-acceptance be placed under a still more serious disability.

The Plan of the Monetary Commission of the Indianapolis Convention

Immediately after the election in 1896, the president of the Board of Trade of Indianapolis issued an invitation for a National sound money conference. In response a convention assembled January 12,

1897, the principal result of which was the appointment of a commission to prepare a report and memorial representing the best "sound money" ideals. As a part of their work a bill was drafted, which was introduced into the House of Representatives by Mr. Overstreet. This was the first reflection of the direct spirit of the campaign which required an adequate capitalization of Government credit-money-issues. The Treasury was to have a special division of Issue and Redemption, to which were to be transferred all funds created for the redemption of Government monetary obligations. The outstanding issues were to be made sound by transferring from the general fund to this division gold to the amount of twenty-five per cent of all United States and Treasury notes of 1890. Silver coins and silver certificates were to be made exchangeable for gold, and besides the value of the silver contained in the coins and held against certificates, five per cent of all silver obligations was to be added to the gold-reserve to insure current redemption. This solution of the money problem, however, was to serve a temporary purpose only, since the gradual retirement of all obligations of the Treasury except silver was specifically provided for. The ultimate solution of the money problem was to be by the same method as proposed in the Baltimore Plan, — to shift the burden of money issue from the Treasury to the banks, and to secure their payment

"Soundness" of money-issues amply provided for

by a current "redemption fund" (five per cent) and a common "guarantee fund" (five per cent), and by making the issues a lien on all assets of the bank issuing them, besides by assessment making all of the banks in the system responsible for a deficit. The money provision was eminently "sound."

The "soundness" of the commercial-credit system was not so well guarded. No additional capital strength was to be given to the commercial banks undertaking to carry this new financial load. On the other hand the capital requirements of banks were to be distinctly lowered. The bond deposits to be originally made were only twenty-five per cent of the capital, while the banks were to be permitted to issue to the full amount of "unimpaired capital."

Banks were to be greatly weakened

But these original deposits might ultimately be withdrawn. The only banking capital that was to be set aside for note redemption was the five per cent fund, which was not to be counted as a part of the reserve for the redemption of credit-accounts.

Elasticity

Elasticity in the currency was to be attained by taxing all notes issued above sixty per cent of the capital of the bank issuing them at six per cent. In other words, sixty per cent of the bank-notes was intended to supply the permanent demand for a circulating medium, and forty per cent of the authorized issue was to serve to supply extraordinary demands — this emergency

currency to be retired through the autonomous action of the tax after the extraordinary demand had passed. But for ultimate redemption in standard money, only twenty-five per cent of the banking reserve was to be in coin, and this might be silver. Such a National currency provision needs no further comment. That such a measure would not increase the elasticity of bank credit-accounts is certain. Under circumstances similar to those that had prevailed when the Treasury found difficulty in meeting its outstanding obligations, it is to be fairly presumed that our National credit would receive a more serious shock than in 1893 and the years following.

The McCleary Bill

Closely following the Commission Bill came the McCleary measure, introduced into the House May 11, 1898. In this we again have reflected the spirit of the campaign of 1896. In its Treasury features it was almost a direct copy of the Commission Bill. By its provisions the several forms of issues of the Treasury were specifically recognized as obligations of the Government to pay gold on demand, and all forms of money-issue were to be made interchangeable. By this the financial needs of the Treasury for redemption of its credit-issues were also to be independently capitalized. A division of Issue and Redemption was to be created, similar to that provided for in the

Credit-money to be made sound by gold redemption

Act of 1900; this was to be made guardian of the fund created to protect money obligations. The reserve was to be equal to twenty-five per cent of all legal-tender notes, and silver Treasury notes of 1890, and five per cent of all silver coinage. The principle of shifting the burden, however, was not abandoned. National banks were to be permitted to obtain notes on deposit of bonds as at present, the provision being, however, that the bonds might be gradually withdrawn. In addition, they would be required to issue "reserve notes" to an amount equal to at least twenty-five per cent of their capital, on deposit of an equal amount of United States notes. They were to receive as a bonus the privilege of issuing an equal amount of "national currency notes" not to exceed forty per cent of their capitalization — the total amount of note-issues (bank-notes, reserve notes, and currency notes) not to exceed one hundred per cent of the unimpaired capital. While, therefore, the Treasury obligations were clearly recognized, and adequate provision was made for their redemption, every inducement was given to the banks to gradually assume the Government's monetary responsibilities. These bank issues were also to be rendered "sound" by all of the methods before suggested.

As with the measures previously proposed, the McCleary Bill was one which would have operated to weaken capital support to bank accounts — the principal form of funds with which business is done.

The amount of direct capital requirement for support of money-issues, however, was increased, and to this extent it was superior to the several plans previously proposed. Before issues might be had, the bank must invest at least sixty per cent of the amount of notes applied for in collateral securities or Government notes for deposit, as a fund for final redemption. The bank with $100,000 capital could not issue $100,000 of notes unless it first purchased $20,000 of bonds, and $40,000 of United States notes. Its available "cash" from such a capitalization, therefore, would not exceed $140,000; and of this only $40,000 (the emergency circulation) would be a prior lien on the other assets — that is to say, $60,000 of capital-resources would be left for the final redemption of current banking accounts. The notes could not wipe out the entire capital and leave stranded the holders of accounts. In addition to these provisions, fifty per cent of the "money-reserves" of the bank was required to be in gold (double the amount of coin required by the Commission Bill), thus preventing gold exportation with increasing credit-issues.

Results on sound banking

A very definite provision was also made for elasticity in the money supply. All issues over eighty per cent of capitalization were to be taxed at the rate of one-half of one per cent per month or six per cent per annum. This would have been adequate to meet all usual fluctuations in money-demand. As a

funding measure its weakness lay in decreasing rather than increasing the capital support to be provided for in the banking business — a capital support which had proved too weak to sustain credit-accounts in time of financial strain.

Elasticity provided for in the currency

The Gage Bill

Secretary Gage's measure for currency reform was the immediate forerunner of the Currency Act of 1900, which adequately capitalized the Treasury to protect its credit-issues. It contained the provisions proposed by the Monetary Commission Bill and the McCleary Bill for the erection of a special division of the Treasury to be known as the "Division of Issue and Redemption." To this division was to be transferred $125,000,000 in gold, to be held in trust for the redemption of Treasury credit-issues, and a lien was to be given on the general fund to reimburse the reserve fund for redemptions made. It was deficient, however, in specific provisions for support of the general fund.

Capitalization of currency demands

Secretary Gage still clung to the idea of ultimately relieving the Treasury from credit-money functions by enlarging the bank-note circulation and shifting the financial burdens of the Government on the banks. To the end of encouraging the banks to supply the ordinary money-demands, they were to be

permitted to issue to the minimum amount of fifty per cent of their capital, on deposit of bonds, United States notes, Treasury notes of 1890, and silver certificates, and after which minimum amount had been reached, to permit an additional issue of twenty-five per cent of such deposits without further collateral security — *i.e.*, two-thirds of the issues were to be collaterally secured. The total issues were not to exceed the amount of the paid-up capital. For the current redemption of bonds a ten per cent fund was to be deposited with the Treasurer. For final redemption a guarantee fund was provided for by taxing the "unsecured circulation" two per cent per annum; a lien was to be given on the general assets of the bank of issue; and the notes were to be guaranteed by the Government. As in the other plans proposed, the notes were to be "sound" beyond question.

Bank issues to supplant Treasury issues

As a banking measure it was the same in kind as those which had preceded, but better in a degree, in that it required the banks to capitalize a minimum of sixty-six per cent of the gross amount of issues by collateral deposits, and a ten per cent redemption fund; they were also required to create a surplus fund for the guarantee of ultimate payment of notes. While it was a stronger banking measure than the several previous propositions, it was weaker than the National Bank Act. No provision was made for increasing

Banking features

capitalization, while the banks were to be encouraged to do a larger credit business proportionate to capital invested — to further encumber the resources used for current banking equipment. It is a logical conclusion that if such a measure had become a law, whatever could have been gained by increasing elasticity in the money circulation would be more than lost in decreased ability to extend business accommodations.

The Currency Act of 1900

This was the first bill which did not confuse the functions and obligations of the two independently organized national funding institutions — the Treasury and the National bank. It was a measure directly in line with the evolution of American financial ideals of the century. The people had given unmistakable expression to opinion with respect to the Treasury and its obligations — since the passage of the National Bank Act they had not directly considered the bank. Four years after the election of 1896 the first positive legislation pertaining to the currency was spread on the statute books, reaffirming the gold standard law of 1873, and providing for the redemption of credit-money-issues in gold. A negative measure had previously passed repealing the Sherman Act, thereby relieving the Treasury from increasing burdens in the form of silver obligations, but the

Credit-issues of the Treasury made sound by adequate capitalization

Act of 1900 undertook adequately to capitalize the redemption demands of the Treasury. At that time there were outstanding about $1,000,000,000 of credit-issues. To provide for current redemptions of the different forms of monetary obligations, the device suggested by the Monetary Commission, by the McCleary Bill and by the Gage Bill was adopted, creating a special department of the Treasury to be known as the Division of Issue and Redemption, and to this was transferred $150,000,000 of gold coin (about fifteen per cent of the credit-issues to be redeemed). To guarantee ultimate redemption of all Treasury obligations, the Secretary was enjoined at all times to maintain the value of issues at a par with gold, and as a means to this end gave to the Division of Issue and Redemption a first lien on all revenue funds of the Government; collateral to this, the Law placed in the hands of the Secretary of the Treasury the power to make unlimited use of the credit of the Government to procure gold to replenish the general fund whenever such might be found necessary to reimburse the Division of Issue for redemptions. The effect of this Act was to fortify the Treasury issues against all possibility of discredit, and to place behind the public institution of credit-money circulation the united revenue and loan powers of the nation.

The Fowler Bills of 1902 and 1903

After the enactment of the gold standard currency Law of 1900 the two bills which take title from the Chairman of the Committee on Currency and Banking come as voices from the tomb. The Currency Act of 1900 was in direct line with the development of our funding system and had finally established the credit currency of the country on a financially sound basis. There remained only two other steps to be taken to perfect the adaptation to our funding needs, and these were both primarily banking questions: (1) How may the banks obtain money to meet the extraordinary money-demands of their customers; and (2) how may they equip themselves to expand their credit to meet fluctuating demands for credit-accommodation and at the same time maintain safe proportionate money-reserves for current redemptions. Legislation which would accomplish these results must be banking legislation. To attain either of these results would require that provision be made for a capitalized reserve which would be adequate to obtain the cash necessary both for increasing the money circulation and for maintaining increased credit-accounts. That such reserve must be a capital reserve follows for the reason that a reserve of assets acquired in exchange for bank-credit would defeat the very purpose for which it was held — on conversion of such a reserve commercial accommoda-

tions would be reduced instead of expanded. The Fowler Bills referred to made no provision for either of these desirable banking results. They attempt again to solve the "sound money" problem which was already solved by the Currency Act of 1900. The excuse for reopening the money situation is to provide "elasticity." But in the measures proposed the character of the demand, as well as the necessary means successfully to meet the demand, were overlooked. The first principle of business, so far as obtaining money is concerned, is to have something to offer for it. The measures here introduced would permit the banks when in straits to obtain money from the Division of Issue and Redemption to meet demands on their own credit-accounts without having anything to pledge for it. That is, the banks would be relieved from doing for their credit what the United States Treasury had found it necessary to do — to capitalize their redemption demands, and, in lieu of the current redemption reserve proving too small, to have another fund or reserve which it might draw upon for collateral support. A large part of Mr. Fowler's Bills was designed to break down the Treasury system now established on a sound basis, and in lieu of the Treasury reserve to do what many others had proposed — to secure the bank-note by depriving the bank depositor of his security. It cannot be thought that such a system will ever add to the "soundness" (the capital strength) of our

banking institutions, nor that increased banking weakness can contribute to "elasticity" in bank-credit.

The Payne Bill, 1903

The measures proposed by Mr. Payne in the House and by Mr. Aldrich in the Senate are steps in the right direction. The principle here invoked is one that carries with it the largest possibilities for elasticity, both in the currency and in bank-credit, if carried to its logical conclusion. The Bill proposed to place in the hands of the Secretary of the Treasury the power to receive from banks invested capital reserves ("bonds of the United States, bonds or other interest-bearing obligations of any State of the United States, or any legally authorized bonds for municipal purposes . . . which for a period of ten years previous to such deposit has not defaulted . . . and the first mortgage bonds of any railroad company which had paid dividends of not less than four per centum per annum regularly and continuously on its entire capital stock for a period of not less than ten years") as collateral for loans. The banks were to be encouraged to carry surplus capital-resources in the form of gilt-edge securities. A bank, therefore, which is not suffering from under-capitalization, which has not already increased its credit-obligations beyond a safe proportion to total unimpaired capital (capital available for redemptions) even though its cash reserve provided for

current redemptions were threatened, could obtain the cash needed. If it had an invested capital-reserve to fall back upon it might immediately convert this into cash at the Treasury. Assuming this measure had passed, that it had been supplemented by a law which restrained banks from incurring credit liabilities to exceed three or four times its unimpaired capital, and that it were also required to keep this redemption capital "reserved" in the form of cash, or investments such as the Treasury would receive, under such circumstances the bank would be required to capitalize its customers' greatest needs. It would at times of low credit-demand have a capital reserve largely in excess of the requirement, the surplus of which could be invested. This would place in the hands of the banks the power to increase the money circulation and credit-accommodations at any time an increase in money or credit-funds was needed, and with entire safety to the community. By such an extension of the principle we would have attained for our funding system both elasticity and increased financial stability.

The measure proposed by Mr. Payne is essentially an amendment of the Bank Act. If the amendment were so changed as to permit the issue of Treasury notes (whether they be in the form of bank-notes, greenbacks, currency certificates, or what not), as well as to deposit (loan) its revenue surplus against such collaterals, then the question of general Treas-

ury condition would be completely eliminated. Further, if interest were to be charged on such loans at the rate of, not one and one-half per cent, as proposed, but five or six per cent, the notes issued — whatever their form — would be promptly retired when they were not needed for circulation.

The Payne measure (together with an extension of the same principle to include increased capitalization of banking needs, and a proper interest charge on emergency issues) would do for bank credit-funds and for the business of banking (selling commercial credit-accommodations at a profit) what the Currency Law of 1900 has done for our credit-money. An adequate capitalization of bank credit-accounts would complete the evolution in the American funding system, adapting it to the nation's fluctuating business needs.

APPENDIX OF DOCUMENTS

"THE BALTIMORE PLAN" OF CURRENCY REFORM

1896

OUTLINES OF THE PLAN

(*Digest taken from "Sound Currency"*)

SECTION 1. The provision of the National Bank Act requiring the deposit of bonds to secure circulating notes hereafter issued, shall be repealed.

SECT. 2. Allow the banks to issue circulating notes to the amount of 50 per cent of their paid up, unimpaired capital, subject to a tax of one-half of 1 per cent per annum upon the average amount of circulation outstanding for the year; and an additional circulation of 25 per cent of their paid-up, unimpaired capital, subject both to the tax of one-half of 1 per cent per annum and to an additional heavy tax per annum upon the average amount of such circulation outstanding for the year; said additional 25 per cent to be known as "emergency circulation."

SECT. 3. The tax of one-half of 1 per cent per annum upon the average amount of circulation outstanding shall be paid to the Treasurer of the United States as means of revenue, out of which the expense of the office of the Comptroller of the Currency, the printing of circulating notes, etc., shall be defrayed.

The excess over one-half of 1 per cent of the tax imposed upon the "emergency circulation" shall be paid into the "guarantee fund," referred to in Sect. 6.

SECT. 4. The banks issuing circulation shall deposit and maintain with the Treasurer of the United States a "redemp-

tion fund" equal to 5 per cent of their average outstanding circulation, as provided for under the existing law.

SECT. 5. The redemption of the notes of all banks, solvent or insolvent, to be made as provided for by the existing law.

SECT. 6. Create a "guarantee fund" through the deposit by each bank of 2 per cent upon the amount of circulation received the first year. Thereafter impose a tax of one-half of 1 per cent upon the average amount of outstanding circulation, the same to be paid into this fund until it shall equal 5 per cent of the entire circulation outstanding, when the collection of such tax shall be suspended, to be resumed whenever the Comptroller of the Currency shall deem it necessary.

The notes of insolvent banks shall be redeemed by the Treasurer of the United States out of the "guarantee fund," if it shall be sufficient, and, if not sufficient, then out of any money in the Treasury, the same to be reimbursed to the Treasury out of the "guarantee fund," when replenished, either from the assets of the failed banks or from the tax aforesaid.

National banking associations, organized after this plan shall have gone into operation, may receive circulation from the Comptroller of the Currency upon paying into the "guarantee fund" a sum bearing the ratio to the circulation applied for and allowed that the "guarantee fund" bears to the total circulation outstanding, and to be subject to the tax of one-half of 1 per cent per annum, as called for by the Treasurer of the United States for the creation and maintenance of this fund.

No association or individual shall have any claim upon any part of the money in said "guarantee fund," except for the redemption of the circulating notes of any insolvent national banking association. Any surplus or residue of said "guarantee fund" which may be hereafter ascertained or determined by law shall inure to the benefit of the United States.

SECT. 7. The Government shall have a prior lien upon the assets of each failed bank and upon the liability of shareholders, and for the purpose of restoring the amount withdrawn from

the "guarantee fund" for the redemption of its circulation, not to exceed, however, the amount of the failed bank's outstanding circulation after deducting the sum to its credit in the "redemption fund" (Sect. 4) already in the hand of the Treasurer of the United States.

SECT. 8. Circulation can be retired by a bank at any time upon depositing with the Treasurer of the United States lawful money in amount equal to the sum desired to be withdrawn, and immediately upon such deposit the tax indicated in Sects. 2, 3 and 6 shall cease upon the circulation so retired.

SECT. 9. In the event of the winding up of the business of a bank by reason of insolvency, or otherwise, the Treasurer of the United States, with the concurrence of the Comptroller of the Currency, may, on the application of the directors, or of the liquidator, receiver, assignee, or other proper official, and upon being satisfied that proper arrangements have been made for the payment of the notes of the bank and any tax due thereon, pay over to such directors, liquidator, receiver, assignee, or other proper official, the amount to the credit of the bank in the "redemption fund" indicated in Sect. 4.

"THE CARLISLE PLAN"

1896

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

That so much of all acts and parts of acts as require or authorize the deposit of United States bonds to secure circulating notes issued by national banking associations, or as require such associations to deposit or keep on deposit United States bonds for any purpose except as security for public money, be, and the same are hereby, repealed as to associations taking circulation under this Act; and notes issued under this Act shall not contain the statement that they are so secured.

SECT. 2. That any national banking association . . . . may

take out circulating notes to an amount not exceeding 75 per centum of its paid-up and unimpaired capital upon depositing with the Treasurer of the United States currency certificates . . . . or United States legal-tender notes, including Treasury notes . . . . and other lawful money of the United States, at the discretion of the Secretary of the Treasury, as a guaranty fund equal to 30 per centum of the circulating notes applied for. The association making such deposit shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law; and all such notes shall constitute, and are hereby declared to be, a first lien upon all the assets of the association issuing the same. . . .

SECT. 4. That each national banking association shall redeem its notes at par on presentation at its own office and at such agencies as may be designated for that purpose by the Comptroller of the Currency; and whenever such association desires to retire the whole or any part of its circulation, the notes to be retired shall be forwarded to the Comptroller of the Currency for cancellation, and thereupon a sum equal to 30 per centum of such cancelled notes shall be returned to the association, in lawful money of the United States. . . .

SECT. 5. That in order to provide a safety fund for the prompt redemption of the circulating notes of failed national banking associations each such association . . . . shall pay the Treasurer of the United States, ... a tax of one-fourth of 1 per centum for each half year upon the average amount of its circulating notes outstanding, ... until the said fund amounts to a sum equal to 5 per centum upon the total amount of such national bank notes outstanding, and thereupon the collection of said tax shall be suspended. . . . . All circulating notes of failed national banks taken out under this Act not redeemed on presentation to the Treasury of the United States, or an assistant treasurer of the United States, shall bear interest at the rate of 6 per centum per annum from the date of suspension of the bank until thirty days after public notice has been given that funds are on hand for their redemp-

tion, and such notes shall constitute a first lien upon all moneys thereafter received into the safety fund.

SECT. 7. That every national banking association heretofore organized and having bonds on deposit to secure circulation may withdraw such bonds upon the deposit of lawful money of the United States, as now provided by law; and thereafter such association may take out circulation under this Act and be entitled to all rights, privileges, and immunities herein conferred.

SECT. 9. That the Secretary of the Treasury may, in his discretion, use from time to time any surplus revenue of the United States in the redemption and retirement of United States legal-tender notes, and notes issued under the Act of July 14, 1890, but the amount of such notes retired shall not in the aggregate exceed an amount equal to 70 per centum of the additional circulation taken out by national banks and State banks under the provisions of this Act. . . . .

SECT. 10. That the use of circulating notes of and above the denomination of ten dollars issued by a banking corporation duly organized under the laws of any State, and which transacts no other than a banking business, shall be exempt from taxation under the laws of the United States when it is shown to the satisfaction of the Secretary of the Treasury and the Comptroller of the Currency:

First — That such bank has at no time had outstanding its circulating notes in excess of 75 per centum of its paid-up and unimpaired capital;

Second — That its stockholders are individually liable for the redemption of its circulating notes to an amount equal to the par value of the stock owned by them; . . . .

Third — That the circulating notes constitute by law a first lien upon all the assets of the bank;

Fourth — That the bank has at all times kept on deposit with an officer of the State, authorized by law to receive and hold the same, a guaranty fund in currency certificates issued under Section 5193 of the Revised Statutes of the United States, or United States legal-tender notes, including Treasury

notes of 1890, equal to 30 per centum of its outstanding circulating notes; and

Fifth — That it has promptly redeemed its notes at par on demand at its principal office, or at one or more of its branch offices, if it has branches.

Whenever the Secretary of the Treasury and the Comptroller of Currency shall be satisfied that any banking corporation duly organized under the laws of any State, and which transacts no other than a banking business as provided in this section, has been incorporated under the laws of the State in which it is located, and that such laws require

First — That its stockholders shall be individually liable for the redemption of its circulating notes to an amount equal to the par value of the capital stock owned by them;

Second — That the circulating notes thereof shall constitute a first lien upon all the assets of the bank; and,

Third — That such bank shall keep on deposit at all times with an official of the State authorized by law to receive and hold the same, a guaranty fund as required in the fourth paragraph of this section. There shall thereupon issue to said bank a certificate to that effect. Said bank may then issue its notes . . . .

FOWLER BILL OF MARCH 15, 1897

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled:

That there shall be and there is hereby created and established a Department of Finance, which shall have entire and exclusive control and supervision of all national debts, their right to take out secured circulation and issue their notes.

Sect. 2. That there shall be three ministers of finance, who shall take the place of the Comptroller of the Currency and constitute a board of finance; and said board of finance shall conduct the said Department of Finance. . . . .

Sect. 3. That any national bank now doing business, or

any other financial institution doing a similar business, ... may, in accordance with existing law, ... organize upon the following terms and conditions:

If any corporation or association of persons described as aforesaid shall deposit with the United States Government any of the United States bonds now outstanding, or any that may be hereafter issued which, at their stated value as herein set forth, ... circulation known as United States Government bond notes shall be issued to said corporation . . . .

(*a*) That the United States Government bonds now outstanding shall be received at the following prices, to wit:

2s, reg	Q, Mar.	95½
4s, 1907, reg	Q, Jan.	109¼
4s, 1907, coup	Q, Jan.	110½
4s, 1925, reg	Q, Feb.	120⅛
4s, 1925, coup	Q, Feb.	120⅛
5s, 1904, reg	Q, Feb.	113⅛
5s, 1904, coup	Q, Feb.	113⅝
6s, cur'cy, '98, reg	J. & J.	102⅝
6s, cur'cy, '99, reg	J. & J.	105
4s, (Cher), 1897, reg	March	102
4s, (Cher), 1898, reg	March	102
4s, (Cher), 1899, reg	March	102

and that from and after the passage of this Act said bonds shall be received upon the same income basis, respectively.

(*b*) All banks organized under this Act shall take out for issue United States Government bond-notes in proportion to their respective capital . . . . and each bank shall pay into the United States Treasury one-fourth of 1 per centum per annum upon the notes so taken out for issue as a part of the fund to be created and known as "United States National-Bank Note Redemption Fund."

SECT. 5. That at the same time that said corporation, if located in a reserve city, shall deposit United States Government bonds as aforesaid it shall also deposit with the United States Government United States legal-tender notes or gold

certificates, or both, of such an amount that it, together with the gold said corporation has on hand, will equal 15 per centum of its deposits; and the United States Government shall deliver to said corporation gold coin in lieu of said legal-tender notes and said gold certificates. Said corporation shall also deposit at the same time with the United States Government United States Treasury notes or United States silver certificates, at the option of said ministers, or both, which, with the silver coin then held by said corporation, shall amount to 10 per centum of its deposits, and the United States Government shall deliver to said corporation in lieu thereof silver coin of an equal amount; and said legal-tender notes, gold certificates, Treasury notes, and silver certificates shall be thereupon cancelled. Said corporation shall thereafter keep as a reserve 25 per centum of its deposits in the following kinds of money: At least 60 per centum of said reserve shall be in gold coin, and the remaining 40 per centum of said reserve may be in silver coin or United States Government bonds notes: *Provided, however,* That in lieu of one-half of such reserve cash on deposit, subject to check, may be held in reserve cities.

SECT. 6. That at the same time the said corporation, if located outside a reserve city, shall deposit United States Government bonds as aforesaid, it shall also deposit with the United States Government United States legal-tender notes, or gold certificates, or both, of such an amount that it, together with the gold coin said corporation has on hand, will equal 9 per centum of its deposits; and the United States Government shall deliver to said corporation gold coin in lieu of said legal-tender notes and said gold certificates. Said corporation shall also deposit at the same time with the United States Government United States Treasury notes or United States silver certificates, at the option of said ministers, or both, which, with the silver coin then held by said corporation, shall amount to 6 per centum of its deposits, and the United States Government shall deliver to said corporation in lieu thereof silver coin of an equal amount; and said legal-tender notes, gold certificates, Treasury notes, and silver certificates shall

be thereupon cancelled. Said corporation shall thereafter keep as a reserve 15 per centum of its deposits in the following kinds of money: At least 60 per centum of said reserve shall be in gold coin, and the remaining 40 per centum of said reserve may be in silver coin, or United States Government bond notes: *Provided, however,* That in lieu of one-half of such reserve cash on deposit, subject to check, may be held in reserve cities.

SECT. 7. That the United States shall not pay out or reissue any United States legal-tender notes or gold certificates from and after the 1st day of January, eighteen hundred and ninety-eight, but the same when received shall be cancelled and destroyed; and further that the United States Government shall not pay out, issue or reissue any United States Treasury notes or silver certificates from and after the 1st day of January, eighteen hundred and ninety-nine, but the same when received shall be cancelled and destroyed.

SECT. 8. That any corporation organized under this Act may . . . . issue its own circulation, which shall be furnished by the United States Government, and be known as United States national-bank notes. Said United States national-bank notes shall be issued in denominations of ten dollars and multiples thereof, and shall be a first lien upon the assets of the bank issuing the same, and also upon the liability of the stockholders, and may be issued only in the following manner and upon the following conditions:

First — Every bank issuing United States national-bank notes shall at all times maintain against the amount of such notes outstanding a reserve corresponding to that required against its deposits.

Second — Any bank that shall have complied with this law may, with the consent and under the supervision and control of the board of finance, issue an amount of United States national-bank notes equal to 20 per centum or one-fifth of its paid-up and unimpaired capital, and shall pay upon such an amount thereof as may be outstanding at any time a tax at the rate of 1 per centum per annum.

Third — Said bank may issue a second amount of such notes, equal to 20 per centum or one-fifth of its paid-up and unimpaired capital, and shall pay upon such an amount thereof as may be outstanding at any time a tax at the rate of 2 per centum per annum.

Fourth — Said bank may issue a third amount of notes equal to 20 per centum or one-fifth of its paid-up and unimpaired capital, and shall pay upon such an amount thereof as may be outstanding at any time a tax at the rate of 4 per centum per annum.

Fifth — Said bank may issue a fourth amount of notes equal to 20 per centum of its paid-up and unimpaired capital, and shall pay upon such an amount thereof as may be outstanding at any time a tax at the rate of 6 per centum per annum.

Sixth — Said bank may issue a fifth amount of notes, equal to 20 per centum or one-fifth of its paid-up and unimpaired capital, and shall pay upon such an amount thereof as may be outstanding at any time a tax at the rate of 8 per centum per annum.

Seventh — If the amount of United States national-bank notes issued by any bank shall exceed at any time the paid-up and unimpaired capital of said bank, a tax at the rate of 10 per centum per annum shall be paid by said bank on such excess.

Eighth — That said ministers of finance are hereby authorized and empowered to suspend one-half of said tax upon any one or all of the said several issues of United States national-bank notes at any time after nineteen hundred and ten, and at any time after nineteen hundred and twenty said ministers of finance are further authorized and empowered to suspend any portion of the tax then remaining except the 10 per centum tax referred to in paragraph seven.

SECT. 9. That all taxes so paid to the Government upon said United States Government bond notes and said United States national bank notes shall constitute and be known as the "United States National-bank Note Redemption Fund,"

and be held exclusively for the redemption, first, of the United States Government bond notes; second, for the United States national-bank notes in the event of the liquidation of any bank organized under this law: *Provided, however*, That when said "redemption fund" shall exceed 5 per centum of both the United States Government bond notes and the United States national-bank notes such excess shall belong to the United States Government, and may be used by it to defray its general expenses.

SECT. 13. . . . . *Second* — That under such regulations and restrictions as shall be established by the said ministers of finance, national banks organized under this Act may establish branch banks by and with the consent of said ministers, such branch banks to have the right to receive deposits, make loans, grant discounts and buy and sell exchange, but in no case to be permitted to issue circulating notes other than those of the parent bank. It shall in all respects be considered as a part of the parent bank and in each case where such branches are maintained the ministers of finance shall receive in the reports of the central bank a statement, properly sworn to and attested, of the condition of its branches.

SECT. 14. *First* — That in the event of the liquidation of any national bank organized under this Act the United States Government shall redeem upon presentation, after notice given as herein provided, any of said United States Government bond notes or said United States national-bank notes, reimbursing itself for the full amount thereof out of the assets of said bank, and distribute the remaining assets among the depositors and all others having claims in the same manner as now provided by law.

Second — That from the time of the suspension of said bank up to the date set by said ministers of finance for the redemption of said United States national-bank notes, they shall bear interest at the rate of 5 per centum per annum. Such notice shall be given in some newspaper printed in the clearing-house city where said notes were cleared; but nothing herein contained shall be construed to impose any liability upon the Govern-

ment of the United States, or any of its representatives, beyond the amount available from time to time out of said "United States National-bank Note Redemption Fund."

SECT. 15. *First* — That any bank organized under this Act may at any time after nineteen hundred and five, with the consent of the ministers of finance, insure its depositors against loss by paying into the United States Treasury 1 per centum upon the average balance of deposits of the preceding fiscal year, and one-half of 1 per centum upon the average annual balances thereafter until the amount so paid into the United States Treasury by said bank shall amount to 5 per centum of the average balance of said bank for the last preceding year, and that said ministers of finance may then suspend said tax for the time being. If the deposits of said bank shall increase, or for any reason the amount of the insurance fund to the credit of said bank shall be less than 5 per centum of the deposits, said ministers may reimpose said tax of one-half of 1 per centum upon the deposits of said bank; and if said bank shall fail to pay such tax at any time after the payment of said 1 per centum the amount already paid by said bank shall be forfeited to the United States Government and the insurance of said depositors shall thereupon cease.

Second — That the amounts of money so received shall constitute and be known as the "Depositors' Insurance Fund."

. . . .

SECT. 21. That it shall be unlawful for any national bank to engage in the promotion of any enterprise, or to loan the funds of the bank upon the bonds or securities of incomplete and partially developed projects of any kind, such as partially constructed railroads, street-car lines, electric-light, gas, water, mining, manufacturing, or irrigation plants.

INDIANAPOLIS MONETARY COMMISSION BILL

JANUARY 6, 1898

Be it enacted, etc.:

SECT. 4. That there is hereby created a division in the Treasury Department, to be known as the Division of Issue and Redemption, under the charge of an Assistant Treasurer of the United States, who shall be appointed by the President, by and with the advice and consent of the Senate.

SECT. 5. That to the Division of Issue and Redemption shall be committed all functions of the Treasury Department pertaining to the issue and redemption of notes and certificates, and to the exchange of coins, and the said Division of Issue and Redemption shall have the custody of the Bank Note Guaranty Fund and of the Redemption Funds of the national banking associations, and shall conduct the operations of redeeming the circulating notes of national banking associations, as prescribed by law. . . . .

SECT. 6. That a reserve shall be established in the Division of Issue and Redemption aforesaid, by the transfer to it by the Treasurer of the United States from the general funds of the Treasury of an amount of gold, in coin and bullion, equal to 25 per centum of the amount of both United States notes and Treasury notes issued under the Act of July 14, 1890, outstanding, and a further sum in gold equal to 5 per centum of the aggregate amount of the coinage of silver dollars. . . .

SECT. 7. That it shall be the duty of the Secretary of the Treasury to maintain the gold reserve in the Division of Issue and Redemption aforesaid at such sum as shall secure the certain and immediate redemption of all notes and exchange of all silver dollars presented, as hereinafter provided for, and the preservation of public confidence; and for this purpose he shall from time to time transfer to the Division of Issue and Redemption any funds in the Treasury not otherwise appropriated, and in addition thereto he is hereby authorized to issue and sell, whenever it is in his judgment necessary to the ends aforesaid, bonds of the United States, bearing interest at

a rate not exceeding 3 per centum per annum payable in gold coin at the end of twenty years, but redeemable in gold coin at the option of the United States after one year; and the proceeds of all such sales shall be paid into the Division of Issue and Redemption for the purposes aforesaid.

SECT. 16. That, to provide for any temporary deficiency which may at any time exist in the Treasury of the United States, the Secretary of the Treasury be and he is hereby authorized, at his discretion, to issue certificates of indebtedness of the United States. . . . .

SECT. 18. That any national banking association organized under the laws of the United States shall, if its capital be wholly paid up and unimpaired, be entitled to receive from the Comptroller of the Currency circulating notes of denominations hereinafter provided, in blank, registered and countersigned as provided by law, to an amount not exceeding the amount of such paid-up and unimpaired capital, after deducting therefrom its investment in real estate: *Provided*, That during the five years first succeeding the passage of this Act, any national banking association receiving from the Comptroller of the Currency circulating notes in blank under the provisions of this Act, shall maintain on deposit with the Treasurer of the United States, bonds of the United States to an amount, at a valuation computed as hereinafter prescribed, equal to that of the circulating notes so received, whenever such notes shall not exceed 25 per centum of the capital stock. And for each succeeding year after the expiration of five years from the passage of this Act, the amount of bonds required to be deposited before issuing notes in excess of such deposit shall be decreased by 20 per centum of the original 25 per centum of capital stock hereinbefore specified, and from and after the expiration of ten years from the passage of this Act no such bond deposit shall be required. And no further deposit of bonds shall be required than is herein prescribed; and any national banking association having at any time bonds of the United States deposited with the Treasurer in excess of the amount required by law to be at such time

deposited, may withdraw the whole or any part of such excess. But nothing herein contained shall be construed to authorize or permit the withdrawal of bonds required to be deposited under the provision of Section 5153 of the Revised Statutes of the United States, as security for the safe keeping and prompt payment of public moneys deposited with any national banking association.

SECT. 20. That every national banking association shall at all times keep and have on deposit with the Division of Issue and Redemption for the purpose hereinafter specified a sum in gold coin equal to 5 per centum of its outstanding circulation. The amounts so kept on deposit shall constitute a fund to be known as "The Bank Note Guaranty Fund," which fund shall be held for the following purpose, and for no other, namely: —

Whenever the Comptroller of the Currency shall have become satisfied . . . . that any association has refused to pay its circulating notes on demand in lawful money, he shall direct the redemption of such notes from the Bank Note Guaranty Fund aforesaid, and such notes shall thereupon be so redeemed. After the failure of any national banking association to redeem its notes shall have been thus ascertained, the bonds deposited with the Treasurer of the United States shall be sold, as provided by law, and the proceeds of such sale shall be paid into the Bank Note Guaranty Fund. The Comptroller of the Currency shall forthwith collect, for the benefit of said fund from the assets of the bank and from the stockholders thereof, according to their liability, as declared by this Act, such sum as, with the bank's balance in the Bank Note Guranty Fund, shall equal the amount of its circulating notes outstanding. And for this purpose the United States shall, on behalf of the Bank Note Guaranty Fund, have a paramount lien upon all the assets of the association; and such fund shall be made good out of such assets in preference to any and all other claims whatsoever, except the necessary costs and expenses of administering the same.

SECT. 21. That whenever the Comptroller of the Currency

shall ascertain what deficiency, if any, exists between the aggregate collections for the benefit of the Bank Note Guaranty Fund in the case of any failed bank and the amount of its outstanding notes redeemed and to be redeemed from the said fund, he shall assess such deficiency upon all the national banks in proportion to their notes outstanding at the time of the failure of such bank.

SECT. 25. That every national banking association shall pay, on or before the last day of every month, to the Division of Issue and Redemption, a duty imposed at the rate of 2 per centum per annum upon the average daily amount of its circulating notes outstanding in excess of 60 per centum of its capital stock, and not in excess of 80 per centum of such capital stock, and a duty imposed at the rate of 6 per centum per annum upon the average daily amount of such notes outstanding in excess of 80 per centum of its capital stock.

SECT. 30. That no national banking association shall count or report any of its own notes as a part of its cash or cash assets.

McCLEARY BILL

MAY 11, 1898

Be it enacted, etc.: . . . .

That there is hereby created a division in the Treasury Department to be known as the Division of Issue and Redemption.

There is hereby created a board consisting of three members, to be known as the Comptrollers of the Currency. The said board shall have the management of the Division of Issue and Redemption, and shall take the place of the Comptroller of the Currency. . . . .

SECT. 2. That to the Division of Issue and Redemption shall be committed all functions of the Treasury Department pertaining to the issue and redemption of notes and certificates, and to the exchange of coins; and in the said Division of Issue and Redemption shall be held the guaranty fund and

the redemption fund of the national banking associations, and through it shall be conducted the operations of redeeming the circulating notes of national banking associations, as prescribed by law. . . . .

SECT. 3. That a reserve shall be established in the Division of Issue and Redemption aforesaid by the transfer to it by the Treasurer of the United States from the general funds of the Treasurer of an amount of gold, in coin and bullion, equal to 25 per cent of the amount, both of United States notes and Treasury notes issued under the Act of July 14, 1890, outstanding, and a further sum in gold equal to 5 per cent of the aggregate amount of the coinage of silver dollars. . . . .

SECT. 4. That it shall be the duty of the Secretary of the Treasury to maintain the gold reserve in the Division of Issue and Redemption aforesaid at such sum as shall secure the certain and immediate redemption of all notes and exchange of all silver dollars presented, as hereinafter provided for; and for this purpose he may, from time to time, transfer to the Division of Issue and Redemption any funds in the Treasury not otherwise appropriated, in excess of an actual cash balance of $50,000,000; and in addition thereto he is authorized to issue and sell, for gold, whenever it is in his judgment necessary to the ends aforesaid, and for no other purpose, certificates of indebtedness of the United States bearing interest at a rate not exceeding 3 per cent per annum, payable in gold coin at the end of five years, but redeemable in gold coin at the option of the United States after one year, and the proceeds of all such sales shall be paid into the Division of Issue and Redemption for the purpose aforesaid.

SECT. 12. That the circulating notes provided for in this Act shall consist of three classes, namely, national reserve notes, national bank notes and national currency notes.

The words "national reserve notes," when used in this Act, shall be understood to mean notes issued to a national banking association in exchange for United States notes, and for whose current redemption in gold coin the banking association receiving the same shall be made immediately liable, and whose

ultimate payment shall be made by the Government of the United States.

That the words "national bank notes," when used in this Act, shall mean circulating notes issued by national banking associations, and secured by deposits of United States bonds.

That the words "national currency notes," when used in this Act, shall be understood to mean circulating notes issued by a national banking association, and constituting a direct and ultimate liability of the said banking association as provided in this Act.

SECT. 13. That any national banking association, on complying with the provisions of this Act, shall, if its capital be wholly paid up and unimpaired, be entitled to receive from the Comptrollers of the Currency national bank notes or national currency notes, or both, of the different denominations hereinafter specified (none, however, being less than $10) in blank, registered and countersigned as provided by law, to the amounts and in the manner following, and on the following terms and conditions, but in no case exceeding *in the sum of their bank notes and currency notes** the amount of such paid-up and unimpaired capital.

Subdivision A. That any national banking association may deposit with the Treasurer of the United States under such regulations as the Secretary of the Treasury may approve, United State notes to an amount not exceeding its paid-up and unimpaired capital, and shall then be entitled to receive in exchange therefor from the Comptrollers of the Currency an equal amount of National Reserve notes, of the kind and denominations described in Sections 12 and 15 of this Act.

United States notes received into the Division of Issue and Redemption in exchange for national reserve notes shall be cancelled as received.

Subdivision B. That upon the deposit by any national banking association of United States bonds, ... it shall be entitled to receive from the Comptrollers of the Currency

*The insertion of the words in italics is recommended in the report.

national bank notes of different denominations in blank, as provided by this Act, equal in amount to the par value of the bonds so deposited. . . . .

Subdivision C. That any national banking association, having deposited with the Treasurer of the United States, United States notes and received in exchange therefor national reserve notes, shall be entitled to receive and issue, in addition thereto, an amount of national currency notes equal to the amount of national reserve notes received as aforesaid: *Provided, however*, that the amount of national currency notes thus issued shall not exceed the amount of its national bank notes outstanding; And *provided further*, That the notes thus issued shall not exceed 40 per cent of the paid-up and unimpaired capital of the bank, but an additional amount of the national currency notes may be issued.

SECT. 23. That every national banking association shall at all times keep and have on deposit with the Division of Issue and Redemption for the purpose hereinafter specified, a sum in gold coin equal to 5 per cent of the outstanding circulation of national currency notes. The amount so kept on deposit shall constitute a fund to be known as the "guaranty fund," which fund shall be held for the following purpose, and for no other, namely:

Whenever the Comptrollers of the Currency shall have become satisfied that any association has refused to pay any of its circulating notes on demand, they shall direct the redemption of its national currency notes from the guaranty fund aforesaid, and the redemption in gold coin of the United States from the reserve fund in the Division of Issue and Redemption of the national reserve notes issued to it. After the failure of any national banking association to redeem any of said notes shall have been thus ascertained the bonds deposited by it with the Treasurer of the United States shall be sold as provided by law, and the proceeds of such sale shall be applied first to the redemption of the notes for which they are held and the balance, if any, shall be paid into the guaranty fund, so far as

may be necessary to provide for the final redemption of any other outstanding notes of such bank.

The Comptrollers of the Currency shall forthwith collect, for the benefit of said guaranty fund, from the assets of the bank and from the stockholders thereof, according to their liability as declared by this act, such sum as, with the bank balance in the guaranty fund as aforesaid, shall equal the amount of its national currency notes outstanding. And for this purpose the United States shall, on behalf of the guaranty fund, have a paramount lien upon all the assets of the association; and such fund shall be made good out of such assets in preference to any and all other claims whatsoever, except the necessary cost and expenses of administering the same.

SECT. 27. That the fund of 5 per cent of outstanding national bank notes required to be kept on deposit by every national banking association for the current redemption of the circulating notes of such association shall be required to be equal to 5 per cent of the national reserve notes issued to it and of its national bank notes outstanding, and shall be in gold coin of the United States; and the Comptroller of the Currency shall have authority to provide for the redemption of said national bank notes and national reserve notes at any or all of the subtreasuries of the United States. Said note shall be paid in gold coin of the United States, and shall thereupon be returned to the banks to which they were originally issued.

SECT. 30. That when the amount of the National Currency notes of any national banking association issued under this Act shall, together with its national banking notes outstanding, exceed 80 per cent of its capital, every such national banking association shall pay, on or before the last day of every month, to the Division of Issue and Redemption a tax imposed at the rate of one-half of 1 per cent per month upon the average daily amount of said National Currency notes in circulation in excess of 80 per cent of its capital stock, and which shall not have been returned to the comptrollers for cancellation or covered by an equal amount of gold coin deposited with the first comptroller for the retirement of such notes.

SECT. 35. That it shall be lawful for any national banking association to establish branches under such rules and regulations as may be prescribed by the Comptrollers of the Currency.

ALDRICH BILL

DECEMBER 19, 1899

Be it enacted, etc.:

That the dollar consisting of twenty-five and eight-tenths grains gold, nine-tenths fine, shall, as established by Section 3511 of the Revised Statutes of the United States, continue to be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with this standard; and United States notes, and Treasury notes issued under the Act of July 14, 1890, when presented to the Treasury for redemption shall be redeemed in gold coin of such standard.

SECT. 2. That it shall be the duty of the Secretary of the Treasury, in order to secure the prompt and certain redemption of United States and Treasury notes as hereinbefore provided, to set apart in the Treasury a reserve fund of $150,000,000 in gold coin, which fund shall be used for such redemption purposes only, and whenever and as often as any of said notes shall be redeemed from said fund it shall be the duty of the Secretary of the Treasury to use said notes so redeemed to restore and maintain such reserve fund, in the manner following, to wit: *First*, by exchanging the notes so redeemed for any gold coin in the general fund of the Treasury; *second*, by accepting deposits of gold coin at the Treasury or at any subtreasury in exchange for the United States notes so redeemed; *third*, by procuring gold coin by the use of said notes, in accordance with the provisions of section thirty-seven hundred of the Revised Statutes of the United States. If the Secretary of the Treasury is unable to restore and maintain the gold coin in the reserve fund by the foregoing methods, and the amount of such gold coin in said fund shall at any time fall

below $100,000,000, then it shall be his duty to restore and maintain the same by borrowing money on the credit of the United States.

SECT. 7. That upon deposit with the Treasurer of the United States, by any national banking association, of any bonds of the United States in the manner provided by existing law, such association shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited; and any national banking association now having bonds on deposit for the security of circulating notes, and upon which an amount of circulating notes has been issued less than the par value of the bonds, shall be entitled, upon due application to the Comptroller of the Currency, to receive additional circulating notes in blank to an amount which will increase the circulating notes held by such association to the par value of the bonds deposited, such additional notes to be held and treated in the same way as circulating notes of national banking associations heretofore issued, and subject to all the provisions of existing law affecting such notes. . . . .

SECRETARY GAGE'S BILL

Be it enacted, etc.:

That there be established in the Treasury Department, as a part of the office of the Treasurer of the United States, a division to be designated and known as the Division of Issue and Redemption, to which shall be assigned, under such regulations as the Secretary of the Treasury may approve, all records and accounts relating to the issue, redemption and exchange as hereinafter provided of the several classes of United States paper money.

There shall be transferred from the general fund in the Treasury of the United States and taken up on the books of said division as a redemption fund the sum of $125,000,000, in

United States gold coin and bullion, and such further sums of standard silver dollars and silver bullion, purchased under the Act of Congress approved July 14, 1890, as shall equal the silver certificates outside the Treasury and Treasury notes of 1890 outstanding on the date when this Act shall take effect; and thereafter the gold and silver coins and bullion hereby transferred from the general fund in the Treasury as herein provided shall be increased or diminished, as the case may be, in accordance with the provisions of this Act, and in no other way.

SECT. 2. That all United States notes, Treasury notes of 1890 and silver certificates presented for redemption shall be redeemed from the redemption fund herein provided, in accordance with the terms of existing law; but the notes and certificates so redeemed shall be held in and constitute a part of said fund, and shall not be withdrawn from said fund nor disbursed, except in exchange for an equivalent amount of the coin in which said notes or certificates were redeemed; but to enable the Secretary of the Treasury more thoroughly to carry out the provisions contained in this act, he is hereby authorized to exchange any of the funds in the Division of Issue and Redemption for any other funds which may be in the general fund of the Treasury Department.

SECT. 5. That any national banking association whose deposit of bonds is less than the amount of its capital may deposit with the Treasurer of the United States, under such regulations as the Secretary of the Treasury may approve, United States notes, Treasury notes of 1890, and silver certificates, and shall be entitled to receive from the Comptroller of the Currency and to issue an equal amount of its circulating notes; but the aggregate amount of bonds, United States notes, Treasury notes of 1890 and silver certificates deposited by any national banking association shall not exceed the amount of its capital:

Provided, That the total amount of United States notes, Treasury notes of 1890 and silver certificates deposited with the Treasurer of the United States under authority of this section shall not exceed the sum of $200,000,000.

Sect. 6. That the Secretary of the Treasury shall issue, from time to time, in his discretion, bonds of the same character and class as those described in the third section of this act, and shall substitute the same with the Treasurer of the United States for equal amounts of the United States notes, Treasury notes of 1890 and silver certificates deposited by national banking associations, and the bonds so issued and substituted shall be charged to the respective national banking associations, and be accounted for by them at such prices, not less than par, as shall represent the market value of such bonds; and the United States notes, Treasury notes of 1890 and silver certificates released as herein provided shall become a part of the general redemption fund; and the Secretary of the Treasury is hereby authorized to exchange any of said Treasury notes of 1890 and said silver certificates for a like amount of United States notes;

Provided, That the amount of bonds issued under the authority of this section shall not exceed the sum of $200,000,000.

Sect. 7. When any national bank now existing or hereafter organized shall have deposited such United States bonds, United States notes, Treasury notes of 1890 or silver certificates, to an amount of not less than 50 per centum of its capital, it shall be entitled to receive from the Comptroller of the Currency, and to issue, national bank notes, in addition to the 50 per centum thus provided, to the amount of 25 per centum of such deposits; but the circulation issued by any national banking association shall never be in excess of its paid-up capital stock, and the additional notes so issued shall not be secured by said deposit, but shall constitute a first lien upon all the remaining assets of the association issuing such notes. Upon the failure of any association to redeem its circulating notes above provided, whether the same are issued against deposited security or against general assets, the same shall be promptly redeemed by the Treasurer of the United States. To secure the United States against any loss arising from its guarantee to pay and redeem such additional circulating notes, it shall be the duty of the Comptroller of the Currency to levy

upon and collect from every national banking association issuing such unsecured circulation a tax at the rate of 2 per centum per annum on such unsecured circulation; which said tax of 2 per centum per annum shall be paid to the Treasurer of the United States in equal semi-annual payments in January and July of each year, and when so collected it shall constitute a safety fund out of which the United States shall be reimbursed for any redemption of said unsecured circulation it may make as herein provided. The safety fund thus created shall be invested by the Secretary of the Treasury in such Government bonds as he may consider advisable. Said tax of 2 per centum per annum shall be in addition to the tax of one-half of 1 per centum per annum on circulating notes hereinafter authorized.

Sect. 8. That each national banking association shall deposit and maintain in the Treasury of the United States a sum of lawful money equal to 10 per centum of its aggregate circulation, said sum to be in lieu of the 5 per centum redemption fund now required by Sect. 3 of the Act approved June 20, 1874, to be maintained, and to be subject to all the provisions of existing law respecting said redemption fund not inconsistent with the provisions of this Act; and, in consideration of the deposits of bonds, United States notes, Treasury notes of 1890 and silver certificates, and the tax of 2 per centum on the unsecured circulating notes of national banking associations, and of the deposit of lawful money provided in this section, the faith of the United States is hereby pledged to the redemption in lawful money of the United States of all the circulating notes of said national banking associations.

GOLD STANDARD ACT

MARCH 14, 1900

AN ACT TO DEFINE AND FIX THE STANDARD OF VALUE, TO MAINTAIN THE PARITY OF ALL FORMS OF MONEY ISSUED OR COINED BY THE UNITED STATES, TO REFUND THE PUBLIC DEBT, AND FOR OTHER PURPOSES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled:

That the dollar consisting of twenty-five and eight-tenths grains of gold, nine-tenths fine, as established by Section 3511 of the Revised Statutes of the United States, shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with the standard, and it shall be the duty of the Secretary of the Treasury to maintain such parity.

SECT. 2. That United States notes, and Treasury notes issued under the Act of July 14, 1890, when presented to the Treasury for redemption, shall be redeemed in gold coin of the standard fixed in the first section of this Act, and in order to secure the prompt and certain redemption of such notes as herein provided it shall be the duty of the Secretary of the Treasury to set apart in the Treasury a reserve fund of $150,-000,000 in gold coin and bullion, which fund shall be used for such redemption purposes only, and whenever and as often as any of said notes shall be redeemed from said fund it shall be the duty of the Secretary of the Treasury to use said notes so redeemed to restore and maintain such reserve fund in the manner following, to wit: *First*, by exchanging the notes so redeemed for any gold coin in the general fund of the Treasury; *second*, by accepting deposits of gold coin at the Treasury or at any sub-treasury in exchange for the United States notes so redeemed; *third*, by procuring gold coin by the use of said notes, in accordance with the provisions of Sect. 3700 of the Revised Statutes of the United States. If the Secretary is un-

able to restore and maintain the gold coin in the reserve fund by the foregoing methods, and the amount of such gold coin and bullion in said fund shall at any time fall below $100,000,000, then it shall be his duty to restore the same to the maximum sum of $150,000,000 by borrowing money on the credit of the United States . . . . and the gold coin received from the sale of said bonds shall first be covered into the general fund of the Treasury and then exchanged, in the manner hereinbefore provided, for an equal amount of the notes redeemed and held for exchange, and the Secretary of the Treasury may, in his discretion, use said notes in exchange for gold, or to purchase or redeem any bonds of the United States, or for any other lawful purpose the public interests may require, except that they shall not be used to meet deficiencies in the current revenues. That United States notes when redeemed, in accordance with the provisions of this section, shall be reissued, but shall be held in the reserve fund until exchanged for gold as herein provided; and the gold coin and bullion in the reserve fund, together with the redeemed notes held for use as provided in this section, shall at no time exceed the maximum sum of $150,000,000.

SECT. 4. That there be established in the Treasury Department, as a part of the office of the Treasurer of the United States, divisions to be designated and known as the Division of Issue and the Division of Redemption, to which shall be assigned respectively, under such regulations as the Secretary of the Treasury may approve, all records and accounts relating to the issue and redemption of the United States notes, gold certificates, silver certificates, and currency certificates. There shall be transferred from the accounts of the general fund of the Treasury of the United States, and taken up on the books of said divisions respectively, accounts relating to the reserve fund for the redemption of the United States notes and Treasury notes, the gold coin held against outstanding gold certificates, the United States notes held against outstanding currency certificates, and the silver dollars held against outstanding silver certificates, and each of the funds represented

by these accounts shall be used for the redemption of the notes and certificates for which they are respectively pledged, and shall be used for no other purpose, the same being held as trust funds.

SECT. 10. That Sect. 5138 of the Revised Statutes is hereby amended so as to read as follows:

> "Sect. 5138. No association shall be organized with a less capital than $100,000 except that banks with a capital of not less than $50,000 may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed 6,000 inhabitants, and except that banks with a capital of not less than $25,000 may, with the sanction of the Secretary of the Treasury, be organized in any place the population of which does not exceed 3,000 inhabitants. No association shall be organized in a city the population of which exceeds 50,000 persons with a capital of less than $200,000."

SECT. 11. That the Secretary of the Treasury is hereby authorized to receive at the Treasury any of the outstanding bonds of the United States . . . . and to issue in exchange therefor an equal amount of coupon or registered bonds of the United States in such form as he may prescribe, in denominations of $50 or any multiple thereof, bearing interest at the rate of 2 per cent per annum, payable quarterly. . . . .

SECT. 12. That upon the deposit with the Treasurer of the United States by any national banking association, of any bonds of the United States in the manner provided by existing law, such association shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of bonds so deposited; . . . . *provided*, That the total amount of such notes issued to any such association may equal at any time but shall not exceed the amount at such time of its capital stock actually paid in. . . . .

FOWLER BILL

April 4, 1902

Be it enacted, etc.: . . . .

That there shall be, and is hereby, created and established in the Treasury Department a Division of Banking and Currency, which shall be in charge of a board consisting of three members. . . . .

Sect. 2. That if any national bank shall assume the current redemption, as hereinafter described, of an amount of United States notes equal to 20 per centum of its paid-up capital, it shall have the right, without depositing United States bonds as now provided by law —

First — To immediately take out for issue and circulate an amount of bank notes equal to 10 per centum of its paid-up capital, by paying a tax, on the first days of January and July of each year, of one-eighth of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months.

Second — To take out for issue and circulate an amount of bank notes equal to 10 per centum of its paid up-capital at any time after the expiration of one year from the date of the assumption aforesaid; and it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of one-eighth of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months. . . . .

Third — To take out for issue and circulate an amount of bank notes equal to 10 per centum of its paid-up capital at any time after the expiration of two years from the date of the assumption aforesaid; and it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of five-eighths of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months.

Fourth — To take out for issue and circulate an amount of

bank notes equal to 10 per centum of its paid-up capital at any time after the expiration of three years from the date of the assumption aforesaid; and it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of five-eighths of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months.

Fifth — To take out for issue and circulate an amount of bank notes equal to 10 per centum of its paid-up capital at any time after the expiration of four years from the date of the assumption aforesaid; and it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of five-eighths of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months.

Sixth — To take out for issue and circulate an amount of bank notes equal to 10 per centum of its paid-up capital at any time after the expiration of five years from the date of the assumption aforesaid; and it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of five-eighths of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months.

Seventh — With the approval of the Board of Control, to take out for issue and circulate an amount of notes equal to 20 per centum of its paid-up capital at any time after the expiration of six years from the date of the assumption aforesaid; but it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of one and one-half per centum upon the average amount of such notes in actual circulation during the preceding six months.

Eighth — With the approval of the Board of Control, to take out for issue and circulate an amount of notes equal to 20 per centum of its paid-up capital at any time after the expiration of seven years from the date of the assumption aforesaid; but it shall pay into the Treasury of the United States, on the first days of January and July of each year, a tax of two and one-

half per centum upon the average amount of such notes in actual circulation during the preceding six months.

The manner and form of the assumption of the current redemption of the United States notes, as aforesaid, shall be as follows: Each note shall bear the endorsement:

"For value received, the —— national bank of (city), (State), will currently redeem this note in gold coin until the same has been paid and canceled in accordance with the provisions of law." . . . .

Whenever a national bank shall present any United States notes at the United States Treasury for indorsement, as aforesaid, it shall at the same time surrender to the United States Treasury an additional amount of United States notes equal to one-half of the United States notes presented for such indorsement and receive in exchange therefor gold coin; and the United States notes so redeemed shall not be reissued, but shall be canceled and destroyed.

Sect. 3. That when the national banks of the United States shall have assumed the current redemption of United States notes amounting in the aggregate to $130,000,000, and the United States has redeemed and canceled United States notes amounting to $65,000,000, no national bank shall thereafter pay out any United States notes the current redemption of which has not been assumed by some national bank, but shall return the same to the United States Treasury for redemption, and the Secretary of the Treasury shall redeem the United States notes so returned out of the gold coin in the issue and redemption of the Treasury, and they shall not be reissued, but shall be canceled and destroyed. But it shall be the duty of the Secretary of the Treasury to maintain the reserve fund at an amount not less than thirty-three and one-third per centum of the United States notes at any time outstanding.

From and after the first presentation for redemption and cancellation of any United States notes in accordance with the provisions of this section, the Secretary of the Treasury shall not pay out or issue any gold certificates.

Sect. 4. That after the national banks shall have assumed

the current redemption of $120,000,000 of United States notes, and the United States shall have redeemed, canceled, and destroyed $65,000,000 of United States notes, in accordance with Section 2 of this Act, any national bank which has not assumed the current redemption of any United States notes as hereinbefore provided may then take out an amount of circulation equal to 10 per centum of its capital, and from year to year thereafter additional amounts of circulation in accordance with the provisions of Section 2 of this Act; but upon the first 20 per centum of the total circulation to which it is entitled under this Act it shall pay into the Treasury of the United States, on the first days of January and July of each year, five-eighths of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months, and upon all such notes taken out for issue in excess of said 20 per centum the taxes prescribed in Section 2 of this Act. . . . .

SECT. 6. That all the bank notes taken out for issue in accordance with the provisions of this Act shall be furnished by the United States at the expense of the respective banks issuing them, and shall be in denominations of ten dollars and multiples thereof.

SECT. 7. That such notes shall be a first lien upon the assets of the respective banks issuing them, and shall be received upon deposit and for all purposes of debt or liability by every national bank at par and without any charge of whatsoever kind, and such notes shall be receivable for all public dues except duties on imports, and when so received may be paid out again.

SECT. 8. That the total amount of circulating notes of all kinds of any national bank may equal, but shall not at any time exceed, the amount of its paid-up capital. . . . .

SECT. 10. That the Secretary of the Treasury is hereby authorized, in his discretion, to deposit all the money of the United States in excess of $50,000,000, except that in the Issue and Redemption Division of the Treasury, in national banks, upon the condition that said banks shall first deposit in the United States Treasury United States bonds equal in

amount at par to the sum to be so deposited; and such banks shall, on the first days of January and July of each year, pay interest thereon to the United States at the rate of 1 per centum per annum upon the average balances of the preceding six months, but such banks shall not be required to hold any reserve against such deposits. . . . .

"Any national banking association may amend its articles of association with reference to the places where its banking operations are to be carried on upon the unanimous vote of its board of directors by and with the approval of the Board of Control of Banking and Currency: *Provided, however,* That authority to establish branches in the possessions of the United States and in foreign countries shall be given only to banks having a paid-up capital of not less than $5,000,000."

PAYNE BILL

February 26, 1903

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

"Sect. 5153. All national banking associations, designated for that purpose by the Secretary of the Treasury, shall be depositories of public money, under such regulations as may be prescribed by the Secretary, and they may also be employed as financial agents of the Government; and they shall perform all such reasonable duties as depositories of public moneys and financial agents of the Government as may be required of them. The Secretary of the Treasury may deposit in such designated depositories public money received from all sources, and shall require such depositories to give satisfactory security, as hereinafter authorized, for the safe-keeping and prompt payment of the public money so deposited with them and for the faithful performance of their duties as financial agents of the Government. The Secretary of the Treasury may accept as security for the safe-keeping of public money deposited with national banking associations,

as herein authorized, the deposit of bonds of the United States, bonds or other interest-bearing obligations of any State of the United States, or any legally authorized bonds issued for municipal purposes by any city in the United States which has been in existence as a city for a period of twenty-five years, and which for a period of ten years previous to such deposit has not defaulted in the payment of any part of either principal or interest of any debt authorized to be contracted by it, and which has at such date more than fifty thousand inhabitants as established by the last national census, and whose net indebtedness does not exceed 10 per centum of the valuation of the taxable property therein, to be ascertained by the last preceding valuation of property for the assessment of taxes; or the first-mortgage bonds, not including street railway bonds, of any railroad company which has paid dividends of not less than 4 per centum per annum regularly and continuously on its entire capital stock for a period of not less than ten years previous to the deposit of the bonds. The Secretary of the Treasury may accept the securities herein enumerated in such proportions as he may from time to time determine, and he may at any time require the deposit of additional securities, or require any depository to change the character of the securities already on deposit. National banking associations having on deposit public money shall pay to the United States for the use thereof interest at the rate of not less than one and one-half per centum per annum, such rate to be fixed from time to time by the Secretary of the Treasury; and all public moneys in any depository shall be payable on demand upon the draft of the Treasurer of the United States. The United States shall have a lien on the current assets of banks in which public moneys are deposited for the repayment of the same on demand of the Treasurer of the United States as aforesaid; but the securities deposited with the Secretary of the Treasury for the safe-keeping of such moneys shall be sold before the said lien is enforced and the proceeds applied to the discharge of said lien to the extent of the proceeds of sale: *Provided*, That no reserve shall be required on account of such deposits."

FOWLER BILL

FEBRUARY 26, 1903

Be it enacted, etc.: . . . .

That any national bank may, with the approval of the Comptroller of the Currency, take out for issue and circulation an amount of national-bank notes not exceeding 25 per centum of its paid-up and unimpaired capital without depositing United States bonds with the United States Treasury in the manner provided by existing law.

SECT. 2. That said national-bank notes shall be furnished by the United States at the expense of the respective banks issuing them, and shall be in the denominations of ten dollars and multiples thereof.

SECT. 3. That before any national bank shall receive any of the bank notes referred to in this Act it shall first deposit in the Treasury of the United States as a guaranty of the payment thereof an amount of United States bonds or gold coin, or United States notes, or in all equal to 5 per centum of the amount of the notes so taken out. . . . .

SECT. 4. That every national bank taking out such notes for issue and circulation shall, on the first days of January and July of each year, pay into the Treasury of the United States, in gold coin, a tax of one-quarter of 1 per centum upon the average amount of such notes in actual circulation during the preceding six months, and the tax so paid into the Treasury shall, with the 5 per centum deposited as a guaranty for the payment of the notes, constitute a guaranty fund.

SECT. 5. That such notes shall be a paramount lien upon the assets of the respective banks issuing them. . . . .

SECT. 6. That any national bank having notes outstanding in excess of 75 per centum of its paid-up capital, to secure the payment of which United States bonds have been deposited, may, upon the deposit of lawful money for the redemption of such excess, take out for circulation the notes provided for in this Act, without reference to the limitation of $3,000,000 each

month prescribed in Section 9 of the Act approved July twelfth, eighteen hundred and eighty-two.

SECT. 7. That the provisions of the law contained in Section 9 of the Act approved July twelfth, eighteen hundred and eighty-two, limiting the amount of notes that may be retired to $3,000,000 in any calendar month, shall not apply to the notes taken out in accordance with the provisions of this Act.

SECT. 8. That every national bank taking out such notes for issue shall maintain at all times the same reserve against such notes when in actual circulation as is now prescribed by law for deposits. . . . .

SECT. 12. That upon the failure of a national bank any national-bank notes that have been taken out by it in accordance with the provisions of this Act shall, upon presentation to the United States Treasury, be paid in gold coin out of the guaranty fund; but the United States Treasury shall recover from the assets of the failed bank an amount equal to its outstanding notes, and the same shall be paid into the guaranty fund. . . . .

SECT. 15. That in addition to the provisions of Section 5153 of the Revised Statutes, concerning the designation of public depositaries and the deposit of public moneys therein, the Secretary of the Treasury may also deposit in such designated depositaries any public money received from whatever source, including receipts from customs, without requiring security by the deposit of United States bonds and otherwise, as provided in said section, but no such deposit shall in any case exceed 75 per centum of the paid-up and unimpaired capital of any such depositary. National banking associations having on deposit public money in accordance with the provisions of this Act shall pay to the United States for the use thereof interest at the rate of two per centum per annum, payable semi-annually on the first days of January and July of each year. The United States shall have a paramount lien on the assets of banks in which public moneys are deposited in accordance with the provisions of this Act for the repayment of the same on demand of the Treasurer of the United States. . . .